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A HISTORY OF THE FLORIDA VEGETABLE
INDUSTRY AND STATE FARMERS'
MARKETS FOR VEGETABLES

By
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CHAPTER I

INTRODUCTION

State Farmers' Markets were developed in Florida to alleviate the problem of small growers finding buyers who would purchase their products. They were planned so that buyers could concentrate at such markets in the various production areas and pay cash for all farm products offered for sale. These markets have proved successful for selling some items in certain areas, but have not been successful in all areas or for all products.

Vegetables have become the most important group of farm products handled at State Farmers' Markets (Table 1). More markets have been established for vegetables than for any other group of products. However, all vegetable markets have not operated with equal success. What causes some vegetable markets to work more effectively than others? Why do some vegetable markets attract nearly all of the local production while others get only a small proportion of the available supplies?

These are two of the many questions which might be

TABLE 1.--Number and kind of State Farmers' Markets,
total sales, and sales of Florida-produced vegetables,
1935-60

Season Ending June 30	Markets Operating		
	Total Number	Selling Vegetables	
		Number	Per Cent
1935	1	1	100
1936	1	1	100
1937	3	3	100
1938	9	8	89
1939	15	9	60
1940	19	12	63
1941	21	13	62
1942	26	14	54
1943	27	14	52
1944	27	12	44
1945	29	13	45
1946	27	15	56
1947	27	15	56
1948	24	14	58
1949	23	14	61
1950	21	12	57
1951	20	11	55
1952	22	13	59
1953	20	14	70
1954	19	14	74
1955	19	15	79
1956	18	15	83
1957	18	15	83
1958	19	15	79
1959	19	15	79
1960	18	14	78

Sources: Florida, State Agricultural Marketing Board, Annual Reports; and Office of the Director, Florida State Markets, Winter Haven, Florida.

^aIncludes markets selling combinations of items and not necessarily specialized vegetable markets.

^bSales not classified.

TABLE 1.--Extension

Sales		
All Markets	Markets Selling Vegetables ^a	
	Amount	Per Cent of All Markets
(\$1,000)	(\$1,000)	
519	b	b
750	b	b
800	b	b
1,704	715	42
4,619	3,221	70
7,224	5,757	80
11,169	8,683	78
13,291	9,552	72
20,141	15,079	75
23,316	15,984	69
24,616	17,931	73
31,211	24,176	77
33,896	25,234	74
28,928	22,218	77
38,354	30,819	80
35,410	29,633	84
44,929	34,129	76
46,910	39,634	84
41,118	34,752	85
39,317	33,939	86
46,886	42,267	90
48,346	43,230	89
48,210	42,622	88
40,305	34,754	86
46,509	39,787	86
52,141	46,358	89

asked, pertaining to the success of these markets. An attempt is made in this dissertation to answer some of these questions. Some light is thrown on other questions that remain unanswered.

Commercial Vegetable Development

Large-scale commercial vegetable production in Florida was made possible by the improvement of transportation, the development of production and marketing technology, and the adoption of refrigeration and other techniques for quality maintenance. Fast transportation has put Florida production areas only two to five days away from the major city markets in the north. Improved handling, preparation, and refrigeration have permitted highly perishable items to arrive in the northern cities at the peak of quality and condition.

It was just before the turn of the century that vegetables¹ were first produced commercially in Florida.

¹The term "vegetables," as used in this paper, includes certain crops not usually referred to as vegetables, such as melons, Irish potatoes, strawberries, and sweet potatoes, unless otherwise indicated. These items are included in the category of vegetables because of their similarity in cultural practices, post-harvest handling requirements, marketing methods, and distribution. Melons

Records indicate that Chase and Company was among the first to send cars of produce north under ice refrigeration. These early shipments took place during the 1890-91 season.²

The vegetable industry of Florida has had a continuous expansion from 1899 to date (Table 2). The decade of the 1920's brought the greatest increase in acreage. Nearly 84,000 more acres were harvested in 1929 than in 1919. This was an 80 per cent increase. Vegetable-industry expansion during this period was so fast that marketing methods and facilities did not keep pace.

The total number of farms in Florida increased quite rapidly during the decade of the 1920's. As new areas of the state were developed for production, more people came to Florida to find their fortunes.

With most of the population being rural and dependent upon a relatively nonprofitable agriculture, both state and federal governments were encouraging and fostering farmer cooperative associations as a means for farmers to strengthen their competitive position. In an effort to

and strawberries are sometimes considered as fruits; Irish potatoes and sweet potatoes are sometimes referred to as field crops.

²W. A. Sherman, Merchandising Fruits and Vegetables (New York: A. W. Shaw Co., 1928), p. 33.

TABLE 2.--Acreage of vegetables harvested and index of change since 1899, United States and Florida, by decades, 1899-1959^a

Year	Acres of Vegetables Harvested		Index of Acreage (1899 = 100)	
	United States	Florida	United States	Florida
1899	5,904,564	54,620	100	100
1909	5,462,616	89,447	93	164
1919	5,598,801	105,045	95	192
1929	6,648,473	188,919	113	346
1939	6,569,007	230,287	111	422
1949	5,726,699	286,816	97	525
1959	5,006,261	303,624	85	556

Source: U. S., Department of Commerce, Bureau of Census, United States Census of Agriculture, 1900-60.

^aIncludes melons, Irish potatoes, strawberries, and sweet potatoes.

help Florida farmers find sales outlets and to sell at established f.o.b. prices rather than ship on consignment, the State Legislature of Florida created the Agricultural Marketing Board in its 1929 session.³

The duties of this board, as defined by law, were to: (1) Assist, aid, and promote agricultural and marketing associations; (2) give instructions in the operation of agricultural and marketing associations; (3) provide crop and market information; (4) locate markets and buyers; (5) instruct in suitable methods of packing, shipping, and distribution; (6) carry on research work in marketing; and (7) provide information and assistance necessary for efficient selling of farm products.

Programs of the Agricultural Marketing Board, as spelled out in the 1929 law, were slow in getting started. In 1933, while the entire nation was in a serious financial depression, the State Legislature broadened the authority of the Agricultural Marketing Board to permit ownership and operation of State Farmers' Markets.⁴ By this time, it was clear that the immediate need in the principal vegetable-

³Florida, Laws of Florida, 1929 General Laws, Volume 1, Chapter 13809, No. 245 (Tallahassee, Florida), p. 630.

⁴Florida, Laws of Florida, 1933 General Laws, Volume 1, Chapter 15860, No. 5 (Tallahassee, Florida), p. 22.

producing areas was a common meeting place for buyers and sellers. It was felt that research and educational features of the law could produce benefits in the long run, but the State Farmers' Markets could produce needed relief at once.

In the 1934-35 season, the first State Farmers' Market opened for business at Sanford. By the close of the season, \$518,625 worth of farm produce had been sold. Ten years later, 29 markets were operated by the Agricultural Marketing Board. To date, a total of 40 markets has been built, but only 18 operated during the 1959-60 season. The high point in sales was reached during the 1959-60 season, when farm products sold at these markets brought \$52,141,000.⁵

In January, 1961, as required by the 1959 Legislature's reorganization plan, the Agricultural Marketing Board was dissolved and a State Markets' Section was established within the Marketing Division of the Florida Department of Agriculture.⁶ This law makes the Commissioner of Agriculture responsible for the property and operations of the State Farmers' Markets.

⁵Records of the Agricultural Marketing Board and the office of the Director, State Farmers' Markets.

⁶Florida, Laws of Florida, 1959 General Laws, Volume 1, Chapter 59-54 (Tallahassee, Florida), p. 74.

The Problems

Florida's State Farmers' Markets have operated for 25 years. An intensive study of the system has not been made to evaluate, consolidate, or reorganize its operations or procedures. The success of quite a few markets, as measured in terms of quantity and values of farm products handled, has been very impressive. But there are other measurements of success which should be considered. Florida pioneered the field of State Farmers' Markets, and there were no recognized measurements for determining success that were based on experience elsewhere. Since there was no pattern or procedure for the Florida program to follow, markets were developed where they seemed to be needed. Apparently, the development process was one of "trial and error," with the workable methods tried again as each new market was established.

Although number and composition of buyers, number and volume handled by sellers, and the techniques of distribution have changed considerably, state markets have changed but little. In each of the years for which a breakdown of sales is available, vegetables have been the most important group of products sold in terms of total sales (Table 1). During the last 20 years, Florida-grown vegetables accounted

for more than two-thirds of state market sales and in the last few years totaled nearly 90 per cent.

A sizeable proportion of all Florida vegetables has been handled by state markets. Comparable information is available only as far back as the 1937-38 season, when 2.4 per cent of the total shipping-point value⁷ was credited to state markets. Since World War II, sales at state markets have ranged between 23 and 29.5 per cent of the value of all vegetables sold in this state. The highest proportion was attained in the 1946-47 season (Table 3).

Very little is known about the influences that State Farmers' Markets have had on vegetable marketing practices or of the internal problems of market operations. Some think that a State Farmers' Market, located in an area, will automatically cause it to become a successful vegetable-producing center. Therefore, requests have been made for markets to be established in many areas before any marketing research was carried out to determine their potentiality or feasibility. Some markets built without prior study and

⁷Total shipping-point value of Florida vegetables is the equivalent of f.o.b. value used by some references. This value includes grower returns and cost of preparation for sale when such preparation is necessary. Selling charges are not included.

TABLE 3.--Shipping-point value of Florida vegetables and State Farmers' Market sales of Florida-produced vegetables, 1938-60

Season Ending June 30	Total Shipping- Point Value	Vegetable Sales at State Markets	Per Cent at State Markets
	(\$1,000)	(\$1,000)	
1938	29,937	715	2.4
1939	40,385	3,221	8.0
1940	37,253	5,757	15.5
1941	41,290	8,683	21.0
1942	52,131	9,552	18.3
1943	77,496	15,079	19.5
1944	82,522	15,984	19.4
1945	96,792	17,931	18.5
1946	98,383	24,176	24.6
1947	85,405	25,234	29.5
1948	90,977	22,218	24.4
1949	121,557	30,819	25.4
1950	110,010	29,633	26.9
1951	138,248	34,129	24.7
1952	158,997	39,634	24.9
1953	141,614	34,752	24.5
1954	136,405	33,939	24.9
1955	184,086	42,267	23.0
1956	180,732	43,230	23.9
1957	162,663	42,622	26.2
1958	132,181	34,754	26.3
1959	143,933	39,787	27.6
1960	159,082	46,358	29.1

Sources: U. S., Department of Agriculture, Florida Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1938-60; and Florida, State Agricultural Marketing Board, Annual Reports.

investigation have been closed as failures, while others, though still operating, have never been successful by normally accepted measurements.

Purpose of the Study

It is the purpose of this study to find out how well State Farmers' Markets, selling vegetables, serve the interests of producers and buyers. Also, it is intended to determine why some state vegetable markets have had long periods of marginal operation, and still others have ceased operating.

An attempt will be made to single out the strong positive factors which are associated with the successful state markets where vegetables are sold. Conversely, the strong negative factors which are associated with marginal or closed state markets will be pointed out. From an analysis of factors of success and failure, a criterion will be developed that can be used either for improving operations of present markets or for helping to assure the success of future markets. A guide or check list of success factors to be used by market managers, as a management tool, could be quite helpful in improving the operations of

present markets. Such a guide would also help a great deal in determining the establishment of any future markets.

It is believed that the criteria for vegetable market operations could be useful in the management of State Farmers' Markets handling other products. Also, it is believed that such criteria could be useful in discouraging unwise attempts by groups from certain areas of the state to establish markets where they cannot be economically justified. The Department of Agriculture's Market Division Director, and the section chief in charge of State Markets, need reliable information to assist them in determining whether a market is economically feasible when a community organizes pressure to obtain such a facility from the state.

Method of Study

The material presented in this report was obtained from many sources. Authoritative references were used on such subjects as produce-marketing history, progress, and procedures. History of economic trends and conditions influencing the development of the national produce industry, and, more specifically, the Florida vegetable industry,

was utilized. Extensive data were compiled from such sources as the United States Census of Agriculture, United States Census of Business, United States Department of Agriculture, Florida Crop Reporting Service, annual reports of the Florida Agricultural Marketing Board, and many others.

With specific reference to State Farmers' Markets, information was drawn from the legislative records, state statutes, State Marketing Bureau, files of the Director of State Farmers' Markets, and other published and unpublished materials concerning the establishment, financing, and operation of the markets.

A comprehensive coverage is given to trends of the Florida vegetable industry and their relation to the national vegetable industry. The origin and growth of State Farmers' Markets is covered in detail, with special emphasis on markets that sell vegetables.

An analysis was made of all state markets as a group which sell vegetables. Then these vegetable markets were analyzed for each of three regions within the state. Information for each individual state vegetable market was analyzed to a lesser degree. Investments in land and facilities, area and number of producers served, accounting

procedures and market management controls were all given extensive treatment along with the length of operating season, total seasonal volume, average daily volume, and kinds of commodities best suited for state market sales.

The assignment of state vegetable markets on a regional basis was accomplished by dividing the state into three areas along the general lines which separate areas into shipping seasons for winter, early spring, and mid-spring vegetables. This was done to isolate those markets which operate during periods when the nation's vegetable shipments are originating in the winter producing areas, from those which operate when shipments are originating in early spring areas or in mid-spring areas (Figure 1).⁸ In addition to shipping periods, consideration was also given to climate, soils, crops grown, and availability of census data for each county in determining the three areas designated. Availability of census data for the areas was particularly important in the early part of this century when numerous changes were made in county lines as new counties were being formed.

⁸Seasonal breakdowns corresponded with those used by the United States Department of Agriculture Crop Reporting Board (winter -- January, February, March; spring -- April, May, June).



Figure 1.--Florida: Divisions of the state based on earliness of vegetable shipping season, going from south to north.

Two individual markets (Pompano and Starke) were singled out for detailed study and analysis. These were selected because of their status in relation to other operating state vegetable markets. They seem to represent the extremes of state market operations. In terms of the usually accepted measurements of success, the Pompano market has been highly successful, while the Starke market has always been marginal.

CHAPTER II

TRENDS IN VEGETABLE PRODUCTION AND MARKETING IN FLORIDA

Prior to the advent of railroads and refrigeration, vegetable production for fresh market was concentrated close to the areas of heavy population. This was a matter of convenience and necessity, but it meant that fresh vegetables were available only during the local season.

After refrigerator cars had been adapted to hauling fresh vegetables, the next step was the manufacturing of ice by mechanical means near the point of vegetable production. This important development came around 1892 and W. A. Sherman, former Chief Marketing Specialist with the Bureau of Agricultural Economics, United States Department of Agriculture, wrote:

The ice plant brought the whole south within reach of northern markets at once. It was not a case of a few additional miles added each year to the radius from which supplies could be drawn.

.
The local manufacture of ice opened a nationwide area of supply, and within a relatively short time, all the larger markets were

supplied with a year-round succession of fresh vegetables.¹

Mileage of railroad tracks in the United States increased until around 1920 (Table 4). The number of refrigerator cars jumped from around 10,000 in 1900 to 100,000 20 years later.² Following the railway expansion phase, mileage of rural surfaced roads and motor truck numbers began an increase that continues today (Tables 5 and 6).

More recently, mechanical refrigeration has been applied to both rail and motor truck transportation for hauling perishables. Air freight is commonplace for some highly perishable items with a relatively high value.

Within the framework of transportation improvements, refrigeration advancements, instantaneous communications, expanding national economy and rising personal incomes, and phenomenal advances in production and handling technology, vegetable production for fresh market has shifted away from market garden areas close to cities to intensive production areas on a specialized basis. The shifts have generally been

¹W. A. Sherman, Merchandising Fruits and Vegetables (New York: A. W. Shaw Co., 1928), pp. 35-36.

²Ibid., p. 31.

TABLE 4.--Railway mileage in the United States, by decades,
1910-60

Year	Miles
1900	193,346
1910	240,293
1920	252,845
1930	249,052
1940	233,670
1950	223,779
1960	216,999

Source: U. S., Department of Commerce, Bureau of
Census, Statistical Abstract of the United States, 1960.

TABLE 5.--Mileage of surfaced rural roads in the United States, at five-year intervals, 1925-60

Year	Miles
1925	521,000
1930	694,000
1935	1,063,000
1940	1,340,000
1945	1,495,000
1950	1,679,000
1955	1,942,000
1960	2,203,000

Source: U. S., Department of Commerce, Bureau of Census, Statistical Abstract of the United States, 1960.

TABLE 6.--Truck registration in the United States, by decades, 1908-58

Year	Number
1908	4,000
1918	605,496
1928	3,171,542
1938	4,418,859
1948	7,537,911
1958	11,200,000

Source: Automobile Manufacturers Association, Motor Truck Facts, 1959.

from the north and east to the south and west. Recent United States Department of Agriculture information lists California first and Florida second in all three categories of fresh-market vegetable ratings -- acreage, production, and value.³

Early History and Shifts in Production Areas

One of the earliest centers for development of vegetable production at a considerable distance from market was along the shores of the Chesapeake Bay. There fast-sailing oyster boats were employed for sending the produce to the neighboring markets of Baltimore and Philadelphia. With the close of the Civil War and the subsequent opening of direct north-south railroad lines, commercial vegetable production gradually extended down the coast from the Del-Mar-Va peninsula to Norfolk and then to Charleston, Savannah, Jacksonville, and other cities in Florida.⁴

It was in 1866 that ice was first used to maintain freshness and quality of fresh produce during rail shipments.

³U. S., Department of Agriculture, Vegetables -- Fresh Market, 1959 Annual Summary (Washington: Agricultural Marketing Service, 1959).

⁴U. S., Department of Agriculture, Yearbook of Agriculture, 1900 (Washington: U. S. Government Printing Office, 1901), p. 439.

In that year, strawberry shipments were made from Illinois to eastern cities with crates containing 200 quarts of berries packed in a large chest surrounded by ice. Later, a "pony" refrigeration box was used to ship Florida strawberries north. Refrigerator rail cars were used first in Florida in 1884 for strawberry shipments to northern markets.⁵

Both water and rail transportation played vital parts in the early days of the fresh vegetable industry. For a time, it was first one and then the other that took the lead in hauling fresh vegetables to market. And for a long period, it took a combination of both water and rail transportation to successfully market Florida produce.

The first fresh Florida produce known to have been sold in major United States eastern cities was in 1873. The item was oranges, hauled to New York by boat. Early produce shipments were sent all the way to market by boat or sent to Jacksonville or Savannah by rail and from there by boat to seaport cities in the northeast.⁶

Direct rail shipments were not possible prior to 1886. The railroads were not standardized as to gauge of

⁵Ibid., p. 444.

⁶C. B. Maloney, Marketing Florida Citrus Fruits (Gainesville, Florida: University of Florida, 1918), pp. 3 and 39.

track and types of cars, and through traffic was unknown. Products shipped by rail had to be transferred from one train to another at various intervals. This was not only expensive but also injurious to perishable merchandise. However, on an appointed day in 1886, a change to standard gauge was made. By 1887, direct rail service between Florida and New York was commonplace.⁷ The first rail car-load of oranges from Florida arrived in New York in 1887; in 1889, the first all-rail refrigerator car of Florida strawberries arrived there.⁸

Since railroads provided the initial transportation for commercial vegetable production in Florida, railroad development is reviewed briefly. Table 7 gives the railroad mileage up through 1925. An article written by E. O. Cullen of Washington, D. C., gives some idea of where these railroads were located.⁹ In 1860, before the Civil War, railroads connected Jacksonville with Quincy and Fernandina

⁷Florida, Agricultural Experiment Station, A Study of the Cost of Transportation of Florida Citrus Fruits with Comparative Costs from Other Producing Areas, Bulletin No. 217 (Gainesville, Florida: University of Florida, 1930), p. 25.

⁸U. S., Department of Agriculture, Yearbook of Agriculture, 1907 (Washington: U. S. Government Printing Office, 1908), p. 426.

⁹Nathan Mayo, Florida (Tallahassee, Florida: Florida Department of Agriculture, 1928), pp. 97-103.

TABLE 7.--Mileage of railroads in Florida, by decades,
1860-1920 and 1925

Year	Miles
1860	402
1870	446
1880	518
1890	2,471
1900	3,299
1910	4,432
1920	5,212
1925	5,452

Source: U. S., Department of Commerce, Bureau of Census, Statistical Abstract of the United States, 1926.

with Cedar Key. H. B. Plant began building railroads in 1879 to give the Tampa Bay area direct connections with national railroad systems. By 1890, the Atlantic Coast Line had provided rail service to the navigable areas of the St. Johns River and central Florida. During the 1890's, H. M. Flagler was building railroads on the Florida east coast. At the turn of the century, Miami could be reached by rail. In 1902, the Atlantic Coast Line bought the Plant railroad. Key West was given rail service in 1912. In 1915, the four leading railroad companies in Florida -- Atlantic Coast Line, Florida East Coast, Louisville and Nashville, and Seaboard Air Line -- all began a vigorous building program to conquer the "wilderness of Florida." As late as 1925, the Seaboard Air Line built tracks from Coleman to West Palm Beach.

Important Crops and Early Production Areas

Strawberries were the first truck crop shipped from Florida. (In this study, strawberries and melons have been included with vegetables.) Strawberries were grown on an intensive basis at Lawtey in the 1880's. Stephen Powers was credited with making extensive plantings and perfecting

successful shipping methods.¹⁰ Lawtey is located on the former Fernandina-Cedar Key railroad.

About the same time that Lawtey was developing as the strawberry center of Florida, the Kirkwood-Micanopy area was becoming a center of production for tender vegetables of all kinds. This area had considerable frost protection from Payne's Prairie, Levy Lake, and Orange Lake, plus the fact that rail service was available on the north side of Payne's Prairie. Gainesville was on the Fernandina-Cedar Key railroad. In the early days, Payne's Prairie was a large body of water and vegetables were shipped by boat from the south side to the north shore for rail shipment to northern markets.

H. L. Rosenberger, the writer's grandfather, came to work in the citrus industry at Fairbanks in 1882. He moved to Kirkwood in 1887 in search of a warmer climate when the citrus trees at Fairbanks were killed by a freeze. H. L. Rosenberger lived at Kirkwood until his death in 1947. His son, E. D. Rosenberger, the writer's father, was born at Kirkwood in 1889, and still makes his home there. He

¹⁰P. H. Rolfs, "Founders of Florida Horticulture," Proceedings of the Florida State Horticultural Society (1935), p. 139.

has vivid recollections of the early vegetable industry at Kirkwood.

Irish potatoes, another vegetable item grown early in Florida history, was first produced commercially at Hastings. Hastings is on the Florida East Coast railroad. In the 1880's, an agricultural writer had "proved conclusively" that Irish potatoes could not be grown in Florida, especially not at Hastings. The potato growers there proved him wrong.¹¹

The freeze of 1894-95 put vegetables, in general, on a commercial production basis in Florida. Formerly successful citrus growers had their trees frozen to the ground and many turned to vegetable growing as a means of survival.¹² Sanford and Palmetto were two locations where growers switched from citrus to vegetables in a very short time.

The story of how celery production began at Sanford on the Atlantic Coast Line railroad is told by Ben Whitner. Prior to the 1894-95 freeze, celery was grown there only in home gardens. When the citrus trees were frozen, celery was planted as a cash crop. Lack of water control, diseases, and frost plagued production; and, after a crop was made, marketing problems were just as serious. California had a tight control on winter and spring celery production and

¹¹Ibid., p. 138.

¹²Ibid.

distribution outlets. With threats of blacklisting wholesale receivers, California shippers tried to hold their accounts and keep Florida celery out of the markets. Florida celery supplies in the early years of production were not dependable and the season was short. Blacklisting wholesale receivers from regular, dependable California supplies was a real threat. Chase and Company of Sanford began breaking market resistance to Florida celery by sending free samples to wholesale receivers, and immediately following up the samples with personal contacts.¹³

The Manatee River area around Palmetto and the offshore islands in that area were growing vegetables of many kinds long before the freezes of 1894-95, but the freeze intensified the interest in, and culture of, vegetables.

Mrs. Jessie J. Nettles was born in 1884 and lived most of her life at Palmetto. She remembers how vegetables were packed and hauled to Tampa by boat for rail shipment to northern markets, before railroads were built south of Tampa. Mrs. Nettles also remembers the construction of railroads in the Manatee River area just before the turn of the century. The H. B. Plant Railroad system was first to

¹³M. R. Ensign, "What Price Celery?" (Unpublished Paper; Gainesville, Florida: University of Florida, Vegetable Crops Department files, 1926.)

reach the Manatee River area, but the Seaboard Air Line subsequently extended rail service to the Palmetto-Bradenton area.

Early tomato production in Dade County developed against the recommendations of soil chemists.¹⁴ Just before 1900, as railroad construction reached the area, a soil chemist reported the soils of Dade County absolutely unsuitable for any agricultural purpose. Before the report was completed, however, a crop of tomatoes had been successfully grown and profitably marketed.¹⁵ (Dade County at that time included all of the lower east coast of Florida from St. Lucie County south.)

The late P. H. Rolfs, former director of Florida Agricultural Experiment Stations, once expressed the belief that there was no area in Florida where climatic conditions prohibited profitable vegetable growing. He stated, "The inhibiting factor is sociological, in this is included transportation and competent labor during rush season."¹⁶

Vegetable growing in the Everglades muck developed from trappers, hunters, and fishermen planting home gardens. These home gardens were so productive that the products

¹⁴Rolfs, p. 139.

¹⁵Ibid., p. 131.

¹⁶Ibid., p. 138.

could not be consumed locally. The excess vegetables from the gardens were taken by boat down the North New River canal to Fort Lauderdale for shipment north by rail. The Florida East Coast built a railroad into the muck areas in 1925.¹⁷

Irish potatoes in Dade County were first grown commercially in the late 1920's when it was found that they could be produced for sale during the early spring.¹⁸

Vegetable Production in Florida

Vegetable production for fresh market in Florida was centered first in northern and central areas where transportation facilities were more highly developed. As railroad lines were extended and motor trucks came into use, the center of vegetable activity moved southward. More recently, vegetable production has spread throughout the entire state. The industry has flourished with the development of the southernmost part of Florida. Water control and minor element application to muck soils hastened the

¹⁷H. L. Speer, "The Vegetable Deal in the Muck Lands of Palm Beach County," Proceedings of the Florida State Horticultural Society (1951), p. 122.

¹⁸J. A. Cox, "Production of Irish Potatoes in Marl Soils of South Florida," Proceedings of the Florida State Horticultural Society (1954), p. 115.

development of the Everglades area at the southern edge of Lake Okeechobee, and made it one of the world's most famous vegetable-producing centers.

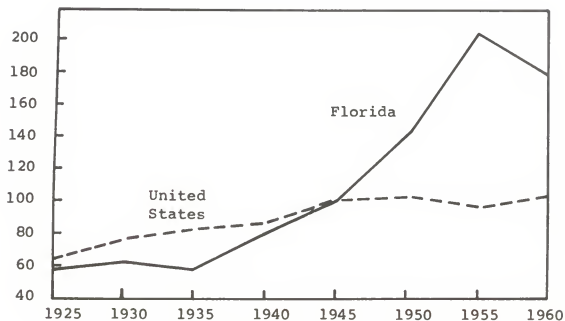
Acreage planted to vegetables in Florida has increased steadily since 1900 compared to a decrease for the United States as a whole (Table 2). Between 1899 and 1959, Florida vegetable acreage, as shown in United States Agricultural Census data, increased 456 per cent, or 249,000 acres, while the United States lost 16 per cent of its acreage, or 898,303 acres.

In 1899, only .9 per cent of the national vegetable acreage was in Florida; by 1959, this had increased to 6 per cent. Florida had also gained more in quantity of fresh vegetables produced than the nation as a whole. In the last 35 years, Florida vegetable production has increased 200 per cent, compared to an increase of 67 per cent in the total United States production (Figure 2).

Acreage, Production, and Value

Annual Florida vegetable acreage, production, and value of record since 1925 are presented in Table 8.¹⁹

¹⁹While there is no comparable information for the period before 1925, it is assumed that production and value expanded with acreage between 1900 and 1925, just as they have since 1925.



Source: Calculated from Tables 8 and 127.

Figure 2.--Trend in commercial vegetable production in Florida and the United States. (1945 = 100 per cent)
(Includes melons, Irish potatoes, strawberries, and sweet potatoes.)

TABLE 8.--Acreage, production, and value of major commercial vegetables for fresh market, Florida, 1925-60

Year	Acreage for Harvest	Production	Value
	(Acres)	(1,000 Cwt.)	(\$1,000)
1925	156,010	10,943	36,313
1926	125,480	9,500	37,083
1927	165,360	10,867	32,583
1928	173,280	11,347	37,225
1929	191,910	12,511	38,375
1930	206,950	11,596	41,964
1931	191,900	12,973	32,125
1932	182,450	9,380	25,511
1933	196,200	11,196	20,570
1934	207,700	12,221	30,540
1935	200,800	10,918	29,367
1936	208,900	10,220	30,605
1937	218,400	11,954	35,159
1938	237,250	15,748	30,572
1939	226,450	14,061	43,646
1940	214,800	14,896	37,833
1941	218,700	13,684	45,494
1942	212,450	12,943	54,442
1943	203,050	12,926	80,211
1944	240,300	15,941	77,580
1945	253,950	18,931	99,797
1946	276,900	19,475	102,109
1947	247,600	15,692	82,007
1948	255,580	19,988	92,098
1949	271,850	22,753	120,444
1950	309,300	27,119	107,473
1951	309,050	29,107	139,333
1952	323,100	30,488	154,803
1953	345,350	32,881	135,294
1954	351,800	35,476	137,089
1955	346,550	38,562	180,512

TABLE 8.--Continued

Year	Acreage for Harvest	Production	Value
	(Acres)	(1,000 Cwt.)	(\$1,000)
1956	353,300	37,971	173,706
1957	369,600	34,657	157,309
1958	343,100	32,105	125,028
1959	317,200	29,165	135,120
1960	300,550	33,342	151,196

Sources: Calculated from U. S., Department of Agriculture, Commercial Vegetables, Statistical Bulletin No. 126; U. S., Department of Agriculture, Vegetables for Fresh Market, Statistical Bulletin No. 212; U. S., Department of Agriculture, Sweetpotatoes, Statistical Bulletin No. 237; U. S., Department of Agriculture, Vegetables -- Fresh Market, Annual Summaries, 1957-60; U. S., Department of Agriculture, Agricultural Statistics, 1936-61; U. S., Department of Agriculture, Florida Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summary, 1945; and U. S., Department of Agriculture, Commercial Truck Crops: Estimates of Acreage, Production and Value, 1918-41.

Acreage, as shown by United States Department of Agriculture Commercial Vegetables reports, increased from 156,010 in 1925 to 369,600 in 1957 and declined to 300,550 in 1960. Production in 1925 was around 10,900,000 hundredweights. Peak production of the major commercial vegetable crops included in Table 8 was attained in 1955 when 38,500,000 hundred weights were harvested. Only 33,300,000 hundredweights were produced in 1960. Value was \$36,300,000 in 1925. It declined to \$20,500,000 in 1933 and reached \$180,500,000 in 1955. Value in 1960 was \$151,200,000.

Acreage, production, and value data for minor vegetables have been published annually since 1952 by another agency. This information is presented in Table 8a. Major and minor Florida vegetable data are summarized in Table 8b. The largest acreage was 399,760,000, recorded in 1957. Highest production was 39,569,000 hundredweights, reported in 1955, the same year that value was greatest. The greatest value reported for major and minor Florida vegetables was \$186,125,000.

Using the total figures for major and minor crops in later years when available, the average rate of growth per year from 1925 to 1960 was 3.2 per cent for acreage, 6.2 per cent for production, and 9.8 per cent for value.

TABLE 8a.--Acreage, production, and value of minor commercial vegetables for fresh market, Florida, 1952-60

Year	Acreage for Harvest	Production	Value
	(Acres)	(1,000 Cwt.)	(\$1,000)
1952	38,730	1,681	7,111
1953	36,925	1,612	7,278
1954	36,925	1,613	7,528
1955	35,500	1,007	5,631
1956	26,900	1,045	6,315
1957	30,160	1,400	8,733
1958	27,270	1,347	12,590
1959	28,420	1,348	8,955
1960	31,410	1,438	9,800

Source: Florida, State Marketing Bureau, Annual Agricultural Statistical Summary, 1952-60.

TABLE 8b.--Acreage, production, and value of major and minor commercial vegetables for fresh market, Florida, 1952-60

Year	Acreage for Harvest	Production	Value
	(Acres)	(1,000 Cwt.)	(\$1,000)
1952	361,830	32,169	161,914
1953	382,275	34,493	142,572
1954	388,725	37,089	144,617
1955	382,050	39,569	186,143
1956	380,200	39,016	180,021
1957	399,760	36,057	166,042
1958	370,370	33,452	137,618
1959	345,620	30,513	144,075
1960	331,960	34,780	160,996

Source: Totals for corresponding years on Table 8 and Table 8a.

Increased yields per acre and price inflation caused production and value to increase faster than acreage. Figures for the last three years indicate a leveling off in additional vegetable acreage expansion in Florida. This was the first time three consecutive annual decreases had been recorded. Figures for 1961 show some further contraction of vegetable acreage and production in Florida.

Florida Vegetable Farms and Their Size

The number of farms harvesting vegetables for sale was taken from the decennial agricultural census from 1919 to 1959. Census enumeration methods divide the term "vegetable" used in this thesis into four separate parts. Therefore, in order to prevent duplication of farms reporting, as well as the acreage reported, it was necessary to exclude Irish potatoes, strawberries, and sweet potatoes.

In the decade of the 1920's, when vegetable acreage in Florida made its greatest increase, the number of farms harvesting vegetables for sale increased from 9,297 in 1919 to 16,358 in 1929 (Table 9). This was a 76 per cent increase in the ten-year period. However, since 1929, there has been a continuous decrease in vegetable farm numbers. There were only 4,727 vegetable farms in 1959. Acres of vegetables per farm increased from 6.5 in 1919 to 57.9 in 1959.

TABLE 9.--Number of farms reporting vegetables harvested for sale and average acreage of vegetables harvested per vegetable farm, by areas, in Florida, by decades, 1919-59^a

Item	1919	1929	1939	1949	1959
Number of Farms					
Florida	9,297	16,358	12,716	10,942	4,727
Area 1	b	6,502	4,174	4,825	2,041
Area 2	b	7,380	6,569	4,931	2,062
Area 3	b	2,476	1,973	1,186	624
Average Acreage of Vegetables Harvested per Vegetable Farm					
Florida	6.5	8.5	14.6	23.4	57.9
Area 1	b	6.5	7.3	10.9	18.6
Area 2	b	8.0	8.3	17.2	41.5
Area 3	b	16.0	50.8	100.0	240.4

Source: U. S., Department of Commerce, Bureau of Census, United States Census of Agriculture, 1920-60.

^aExcludes Irish potatoes, strawberries, and sweet potatoes.

^bNot available.

The increase in average acres of vegetables per farm and yields per acre has caused state vegetable production to increase despite fewer farms. Larger vegetable farms and better yields have resulted from specialization, improved technology, mechanization, higher labor productivity, and improved vegetable varieties. Table 8 shows that production has tripled since 1925 but acreage has failed to double during the same period. Calculations reveal that average yield increased from around 70 hundredweights in 1925 to over 110 in 1960, or an increase of over 57 per cent.

Vegetable Production Areas in Florida

It has been pointed out that the vegetable industry in Florida moved southward as it expanded. It was this southward movement and development that caused most of the increase in production and greatly lengthened the shipping season. A study of some of the intrastate shifts of vegetable production helps to understand why the State Farmers' Markets were built where they are. Relative shifts in vegetable acreage between areas and shifts in acreage of vegetables harvested are shown in Table 10.

Area 1, comprising mainly the northern counties, was the earliest to develop commercial vegetable production.

TABLE 10.--Acreage of vegetables harvested in Florida, in various areas, percentage of total acreage, and relative change in acreage, by decades, 1899-59^a

Year	Area 1	Area 2	Area 3	Total
Acres of Vegetables Harvested				
1899	29,825	22,208	2,587	54,620
1909	36,952	43,674	8,821	89,447
1919	33,299	56,501	15,245	105,045
1929	64,246	82,747	41,926	188,919
1939	48,447	74,914	106,926	230,287
1949	60,178	98,619	128,019	286,816
1959	40,358	104,898	158,376	303,632
Per Cent in Various Areas				
1899	55	40	5	100
1909	41	49	10	100
1919	32	54	14	100
1929	34	44	22	100
1939	21	33	46	100
1949	21	34	45	100
1959	13	35	52	100
Index of Change				
1899	100	100	100	100
1909	124	197	341	164
1919	112	254	589	192
1929	215	373	1,621	346
1939	162	337	4,133	422
1949	202	444	4,949	525
1959	135	472	6,122	556

Source: Calculated from U. S., Department of Commerce, Bureau of Census, United States Census of Agriculture, 1900-60.

^aIncludes melons, Irish potatoes, strawberries, and sweet potatoes.

In 1899, it had 55 per cent of the state commercial vegetable acreage. As the industry moved south, Area 1 decreased in relative importance. It harvested only 13 per cent of the state vegetable acreage in 1959. However, this does not indicate that Area 1 has not shared in the state vegetable industry growth. Acreage in this area doubled by 1929 and fell to a level one-third above the 1899 acreage in 1959. Area 1 had nearly 30,000 acres of vegetables harvested in 1899, 64,000 in 1929, and 40,000 in 1959.

Area 2 includes most of the mid- and north-peninsula counties. It contained 40 per cent of the state's commercial vegetable acreage in 1899, increased its share to 54 per cent in 1919, and then dropped to only 35 per cent by 1959. In spite of a small decrease in relative importance, Area 2 has experienced a marked increase in acreage. It had 104,898 acres in 1959, nearly five times the amount in 1899.

Area 3 comprises the southern tip of Florida's peninsula. In 1899, it accounted for only 5 per cent of the state's commercial vegetable acreage. However, its growth has been rapid. In 1959, 52 per cent of the state's vegetables were grown there. The acreage increased from 2,587 acres in 1899 to 158,376 in 1959. The greatest expansion came during the decade of the 1930's when State Farmers'

Markets were being opened at a rapid rate, and when each of the other areas showed a decrease in commercial vegetable acreage.

During the 1940's, each of the three areas continued to expand in acreage. In the 1950's, acreage in Area 3 expanded greatly; in Area 2, expansion was slight; and in Area 1, there was a 33 per cent drop in acreage. Areas 1 and 3 had exchanged their respective positions of 1899 by 1959. Area 2 was still second in importance. As the vegetable industry has shifted, each of the three areas, at one time or another, has had more than one-half of the state's vegetable acreage.

Shifts in Production Areas for Important Crops, 1890-1920

Table 11 shows the three most important Florida vegetable counties and acreage of each major vegetable crop in these counties in 1890, 1900, 1910, and 1920. They portray the steady but slow shift of the production areas southward. In 1890, the three most important counties for each vegetable were divided about equally between Areas 1 and 2. No Area 3 county was among the important counties for any vegetable.

In 1900, Area 2 had nearly one-half of the important

TABLE 11.--Ranking of three most important counties and acreage for major vegetable crops in Florida in 1890, 1900, 1910, and 1920

Year and Crop	Rank of Counties according to Acres		
	First	Second	Third
<u>1890</u>			
Beans	Alachua	Brevard	Lake
Cabbage	Alachua	Sumter	Marion
Cucumbers	Alachua	Sumter	Marion
Eggplant	Hillsborough	De Soto	Hernando
Peas, English	Lake	Alachua	Columbia
Potatoes, Irish	Marion	Alachua	Duval
Potatoes, sweet	Leon	Jefferson	Alachua
Squash	Alachua	Sumter	Jefferson
Strawberries	Bradford	Alachua	Duval
Tomatoes	Lake	Alachua	Manatee
Watermelons	Sumter	Putnam	De Soto
<u>1900</u>			
Beans	Brevard	Alachua	De Soto
Cabbage	Citrus	Marion	Leon
Cucumbers	Alachua	Marion	Sumter
Eggplant	Putnam	Pasco	Leon
Peas, English	Pasco	Leon	Marion
Potatoes, Irish	Leon	Marion	Citrus
Potatoes, sweet	Leon	Jefferson	Gadsden
Squash	Marion	Leon	Pasco
Strawberries	Putnam	Polk	Pasco
Tomatoes	Lee	Manatee	Polk
Watermelons	Putnam	Columbia	Alachua
<u>1910</u>			
Beans	Marion	Dade	St. Lucie
Cabbage	Alachua	Lake	Duval
Cantaloupes	Marion	Alachua	Levy
Celery ^a	Orange	Manatee	Hillsborough
Cucumbers	Alachua	Levy	Orange
Eggplant	Marion	Dade	Duval
Lettuce	Orange	Marion	Manatee
Onions	Duval	Marion	Lee
Peas, English	Alachua	Lake	Santa Rosa
Peppers	Dade	Palm Beach	Duval

TABLE 11.--Extension

Acres Grown in County as Ranked			Total Acres in State
First	Second	Third	
393	194	157	1,167
1,101	267	156	2,372
194	184	64	612
24	12	9	99
5	5	5	41
151	106	49	651
1,168	903	901	15,578
54	54	50	250
109	97	73	490
808	673	214	2,934
312	259	177	2,308
524	410	279	2,199
240	104	101	1,047
158	85	52	460
172	74	28	344
181	86	30	378
308	295	193	1,490
5,260	1,396	1,387	24,642
130	53	24	265
251	148	92	709
521	348	330	3,257
1,066	746	716	4,770
1,393	1,162	786	6,297
566	427	284	2,307
3,979	170	162	4,444
571	208	73	932
475	457	422	2,081
150	95	66	438
786	630	433	2,598
324	70	32	624
139	53	15	261
268	221	192	1,062

TABLE 11.--Continued

Year and Crop	Rank of Counties according to Acres		
	First	Second	Third
Potatoes, Irish	St. Johns	Putnam	Duval
Potatoes, sweet	Duval	Leon	Gadsden
Squash	Dade	Lee	Palm Beach
Strawberries	Bradford	Hillsborough	Polk
Tomatoes	Dade	Marion	Manatee
Watermelons	Marion	Lake	Alachua
<u>1920</u>			
Beans, Lima	Hillsborough	De Soto	Volusia
Beans, snap	Marion	Hillsborough	Palm Beach
Cabbage	Polk	Broward	Palm Beach
Cantaloupes	Marion	Alachua	Santa Rosa
Celery ^b	Manatee	Hillsborough	Polk
Cucumbers	Orange	Levy	Alachua
Eggplant	Palm Beach	Manatee	De Soto
Lettuce	Manatee	Orange	Marion
Onions	Palm Beach	De Soto	Volusia
Peas, English	De Soto	Marion	Polk
Peppers	Palm Beach	Lee	De Soto
Potatoes, Irish	St. Johns	Putnam	De Soto
Potatoes, sweet	Leon	St. Johns	Alachua
Squash	Hillsborough	Manatee	Lake
Strawberries	Hillsborough	Polk	Bradford
Tomatoes	Broward	Palm Beach	Manatee
Watermelons	Suwannee	Polk	Lake

Sources: Florida, Agricultural Statistics, 1890; Florida, Department of Agriculture, Report of the Commissioner of Agriculture, 1901; Florida, Department of Agriculture, Report of the Commissioner of Agriculture, 1911 and 1912; Florida, Department of Agriculture, Report of the Commissioner of Agriculture, 1920.

^aSanford was in Orange County at this time.

^bSeminole not reported.

TABLE 11.--Extension

Acres Grown in County as Ranked			Total Acres in State
First	Second	Third	
5,504	1,176	945	10,647
2,787	1,891	1,563	24,747
140	66	60	547
1,446	158	81	1,785
8,197	1,163	1,034	13,213
7,043	2,460	1,179	15,724
20	8	4	41
1,057	576	456	3,398
1,200	796	752	6,390
896	75	13	1,041
208	45	25	312
1,491	1,386	605	4,654
244	150	110	711
652	345	138	1,497
168	86	23	376
26	24	10	99
707	682	311	2,195
14,591	2,729	2,554	23,481
2,117	1,668	1,655	25,311
90	39	31	284
448	350	205	1,087
1,432	1,042	807	5,578
2,526	2,000	1,453	15,352

counties, and Area 3 had only one. Lee County had first place for tomato acreage. By 1900, counties in Area 2 had replaced the three in Area 1 which were the most important for strawberry production in 1890. The first three watermelon-acreage counties were all in Area 2 in 1890. In 1900, two important watermelon-acreage counties, contrary to the general trend southward, were found in Area 1.

In 1910, five additional vegetable crops (cantaloupes, celery, lettuce, onions, and peppers) were added to the major-item list. Counties from Area 3 appeared frequently in 1910. Counties in Area 1 made up one-third of those listed as being important for major vegetable crops. Strawberries again had an important county in Area 1, the other two strawberry counties were in Area 2. Squash had all three important counties in Area 3. Onions had one county in each of the three areas.

By 1920, Lima beans had been added to the list of major items. Two of the three important cabbage counties were in Area 3. This was the first time any southern county had been among the top three in cabbage acreage. Area 1 had lost its claim on at least one of the top three Irish-potato-growing counties. All three important counties in squash acreage had been changed from Area 3 in 1910 to Area 2 in

1920. Area 3 counties appeared more frequently in the 1920 list than in the 1910 list. The southern counties, having less danger from frost, produced during periods when competition from other states was at a minimum.

Trend in Acreage of Major Vegetables by Areas

Tables 12 through 30 give the annual acreage of major vegetable crops, as published by the Florida Crop and Livestock Reporting Service. Annual acreages are summarized for the three areas of the state for each crop. Shifts in acres of individual crops and trends in the state can readily be seen. Only a few of the more important changes are discussed.

Lima beans.--There were 1,500 acres of Lima beans grown in the 1933-34 season. Acreage increased to 7,600 for the 1945-46 season and then decreased to 1,650 acres in 1959-60 (Table 12). Area 3 started out with the largest acreage, which it held most of the time until the 1951-52 season. Since then, Area 2 has led in Lima bean production.

Snap beans.--Acreage of this crop is shown for the 1928-29 to the 1959-60 season (Table 13). Snap bean acreage increased from 27,000 in 1928-29 to 98,000 in the 1943-44

TABLE 12.--Lima bean acreage, by seasons and areas, Florida, 1933-34 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1933-34	1,500	233	233	1,034
1934-35	1,500	233	233	1,034
1935-36	1,800	550	300	950
1936-37	2,400	1,333	33	1,034
1937-38	4,500	2,067	467	1,966
1938-39	4,800	1,700	300	2,800
1939-40	4,800	1,733	633	2,434
1940-41	7,000	1,883	783	4,334
1941-42	5,000	1,667	767	2,566
1942-43	5,400	1,733	833	2,834
1943-44	4,500	1,283	783	2,434
1944-45	4,800	1,283	833	2,684
1945-46	7,600	2,053	1,763	3,784
1946-47	5,900	1,783	1,683	2,434
1947-48	5,500	1,425	1,025	3,050
1948-49	4,550	1,542	982	2,026
1949-50	4,150	1,542	592	2,016
1950-51	4,600	1,625	825	2,150
1951-52	3,200	1,167	1,192	841
1952-53	3,300	1,008	1,233	1,059
1953-54	2,900	925	1,125	850
1954-55	2,900	942	1,092	866
1955-56	2,500	658	958	884
1956-57	2,400	810	1,075	515
1957-58	2,050	640	1,030	380
1958-59	1,700	558	608	534
1959-60	1,650	365	730	555

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1934-60.

TABLE 13.--Snap bean acreage, by seasons and areas, Florida, 1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	27,000	2,050	10,175	14,775
1929-30	35,800	3,078	13,567	19,154
1930-31	40,000	2,596	13,306	24,098
1931-32	41,500	2,916	10,142	28,442
1932-33	50,800	1,884	8,732	40,184
1933-34	61,300	1,366	7,268	52,666
1934-35	67,300	1,200	7,100	59,000
1935-36	59,340	1,275	6,050	52,015
1936-37	59,150	1,354	7,329	50,467
1937-38	61,050	1,633	7,583	51,834
1938-39	64,300	1,867	6,167	56,266
1939-40	52,300	2,033	7,083	43,184
1940-41	64,000	2,167	7,217	54,616
1941-42	68,000	2,533	7,433	58,034
1942-43	70,700	2,017	7,267	61,416
1943-44	98,000	1,883	6,083	90,034
1944-45	80,500	1,425	3,325	75,750
1945-46	80,200	2,857	4,507	72,836
1946-47	80,400	2,050	6,150	72,200
1947-48	74,500	2,250	5,200	67,050
1948-49	78,000	2,892	6,842	68,266
1949-50	77,600	3,050	6,750	67,800
1950-51	74,300	2,592	6,067	65,641
1951-52	73,600	2,400	5,850	65,350
1952-53	63,300	2,350	5,675	55,275
1953-54	68,200	3,783	6,683	57,734
1954-55	67,500	3,100	6,150	58,250
1955-56	62,300	2,517	4,517	55,266
1956-57	56,500	2,920	4,035	49,545
1957-58	53,100	3,230	4,065	45,805
1958-59	53,100	2,938	3,323	47,539
1959-60	55,800	2,930	4,110	48,760

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1929-60.

season and declined to 55,800 acres in 1959-60. All of the increase was in Area 3. Area 1 acreage is about the same now as it was in 1929-30 and Area 2 acreage is down to about one-third of what it was in 1929-30.

Cabbage.--Acreage of cabbage is also shown for the seasons 1928-29 through 1959-60 (Table 14). Acreage of cabbage increased from 6,500 at the beginning of the period to 23,500 in 1943-44 and declined to 17,900 in 1960. Area 2 has consistently maintained the largest cabbage acreage. Area 3 increased from 1,000 to 6,000 acres. Area 1 acreage has remained fairly constant.

Cantaloupe.--Cantaloupe acreage has never been large compared to that of some other crops, but acreage increases have occurred and Area 3 has shared in these increases (Table 15). Cantaloupe has been reported in Area 3 for less than ten years.

Carrots and cauliflower.--These crops have had relatively small acreages and the Crop Reporting Service has annual data for only a limited number of years (Tables 16 and 17). Area 2 harvested most of the acreage reported for each of these crops.

TABLE 14.--Cabbage acreage, by seasons and areas, Florida,
1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	6,500	580	4,840	1,080
1929-30	3,700	658	2,583	459
1930-31	6,500	742	4,067	1,691
1931-32	5,500	783	3,583	1,134
1932-33	6,200	700	4,300	1,200
1933-34	10,700	1,033	7,233	2,434
1934-35	5,600	617	3,067	1,916
1935-36	9,000	750	5,150	3,100
1936-37	8,500	783	5,283	2,434
1937-38	9,400	475	6,325	2,600
1938-39	10,000	550	6,700	2,750
1939-40	16,000	900	8,950	6,150
1940-41	10,000	167	6,467	3,366
1941-42	18,000	517	10,817	6,666
1942-43	10,000	283	5,683	4,034
1943-44	23,500	1,983	13,883	7,634
1944-45	17,200	1,767	10,567	4,866
1945-46	12,000	845	7,870	3,285
1946-47	12,200	533	8,133	3,534
1947-48	16,700	1,158	11,533	4,009
1948-49	16,000	900	11,450	3,650
1949-50	17,700	1,383	11,583	3,734
1950-51	19,000	767	11,292	6,941
1951-52	15,600	903	9,520	5,177
1952-53	19,900	1,125	12,125	6,650
1953-54	15,700	892	10,292	4,516
1954-55	14,400	725	9,425	4,250
1955-56	16,700	842	10,592	5,266
1956-57	13,900	610	9,345	3,945
1957-58	15,500	992	9,667	4,841
1958-59	17,500	1,007	10,577	5,916
1959-60	17,900	910	10,905	6,085

Source: U. S., Department of Agriculture, Florida,
Crop and Livestock Reporting Service, Florida Vegetable
Crops, Annual Statistical Summaries, 1929-60.

TABLE 15.--Cantaloupe acreage, by seasons and areas, Florida, 1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	600	50	550	. .
1929-30	600	50	550	. .
1930-31	250	50	200	. .
1931-32	200	. .	200	. .
1932-33	400	50	350	. .
1933-34	300	. .	300	. .
1934-35	200	. .	200	. .
1935-36	200	. .	200	. .
1936-37	300	100	200	. .
1937-38	700	500	200	. .
1938-39	500	300	200	. .
1939-40	500	300	200	. .
1940-41	500	300	200	. .
1941-42	500	300	200	. .
1942-43	400	300	100	. .
1943-44	550	250	300	. .
1944-45	500	300	200	. .
1945-46	800	500	300	. .
1946-47	800	575	225	. .
1947-48	1,200	700	500	. .
1948-49	1,200	663	537	. .
1949-50	1,400	825	575	. .
1950-51	1,300	738	562	. .
1951-52	1,500	838	662	. .
1952-53	1,800	905	605	290
1953-54	2,000	758	558	584
1954-55	1,900	750	475	675
1955-56	2,400	668	763	969
1956-57	1,600	541	591	468
1957-58	1,600	541	591	468
1958-59	1,800	438	698	664
1959-60	1,800	415	690	695

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1929-60.

TABLE 16.--Carrot acreage, by seasons and areas, Florida, 1944-45 to 1948-49

Season	Florida	Area 1	Area 2	Area 3
1944-45	750	. .	640	110
1945-46	900	. .	830	70
1946-47	500	. .	450	50
1947-48	400	. .	350	50
1948-49	500	. .	345	155

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1945-49.

TABLE 17.--Cauliflower acreage, by seasons and areas, Florida, 1944-45 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1944-45	500	. .	500	. .
1945-46	500	. .	500	. .
1946-47	600	. .	600	. .
1947-48	400	. .	400	. .
1948-49	600	. .	600	. .
1949-50	800	. .	750	50
1950-51	1,100	. .	975	125
1951-52	1,300	. .	1,175	125
1952-53	1,400	. .	1,250	150
1953-54	1,100	. .	1,000	100
1954-55	1,100	. .	1,025	75
1955-56	1,200	. .	1,100	100
1956-57	900	. .	825	75
1957-58	450	. .	400	50
1958-59	400	. .	375	25
1959-60	300	. .	238	62

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1945-60.

Celery.--Celery acreage is shown for the seasons 1928-29 through 1959-60 (Table 18). The state acreage increased from 6,600 to 11,300. Most of the acreage was in Area 2 prior to the 1954-55 season but, since then, most of it has been in Area 3.

Sweet corn.--This is a relatively new crop in Florida. Acreage figures are available only for the seasons 1947-48 through 1959-60 (Table 19). Acreage increased from 6,000 in 1947-48 to nearly 49,000 in 1958-59. Area 2 had most of the acreage in the earlier years, but Area 3 has had the largest amount since 1950-51. Acreage in Area 3 increased from 1,468 in 1947-48 to over 34,000 in 1959-60.

Cucumbers.--Acreage of cucumbers is shown for the seasons 1928-29 through 1959-60 (Table 20). Acreage variations have not been large for cucumbers. They began with 11,340 in 1928-29, declined to 5,000 during the depression years, and again reached 11,200 by 1945-46. The 1959-60 acreage was 16,600. Areas 1, 2, and 3 shared a better distribution of acreage for cucumbers than for most other vegetable crops. Area 2 began with the largest acreage, but Area 3 moved into first place in 1952-53.

TABLE 18.--Celery acreage, by seasons and areas, Florida,
1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	6,620	. .	6,620	. .
1929-30	6,650	. .	6,650	. .
1930-31	6,150	. .	6,050	100
1931-32	6,850	. .	6,850	. .
1932-33	6,650	. .	6,650	. .
1933-34	6,000	. .	6,000	. .
1934-35	6,000	. .	6,000	. .
1935-36	6,500	. .	6,500	. .
1936-37	7,500	. .	7,355	145
1937-38	7,200	. .	6,800	400
1938-39	6,700	. .	6,100	600
1939-40	7,100	. .	6,040	1,060
1940-41	8,700	100	6,600	2,000
1941-42	9,350	135	6,815	2,300
1942-43	8,750	100	6,280	2,370
1943-44	9,900	100	6,300	3,500
1944-45	11,050	150	6,775	4,125
1945-46	13,500	150	8,175	5,175
1946-47	11,400	100	7,000	4,300
1947-48	11,600	200	7,400	4,000
1948-49	9,400	200	6,125	3,075
1949-50	9,700	250	5,950	3,500
1950-51	10,400	250	6,050	4,100
1951-52	10,400	250	5,940	4,210
1952-53	10,000	250	5,700	4,050
1953-54	10,600	300	5,555	4,745
1954-55	9,100	250	4,405	4,445
1955-56	10,100	200	4,250	5,650
1956-57	10,300	200	4,240	5,860
1957-58	11,400	150	3,990	7,260
1958-59	13,300	150	3,615	9,535
1959-60	11,300	150	2,670	8,480

Source: U. S., Department of Agriculture, Florida,
Crop and Livestock Reporting Service, Florida Vegetable
Crops, Annual Statistical Summaries, 1929-60.

TABLE 19.--Sweet corn acreage, by seasons and areas, Florida,
1947-48 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1947-48	6,000	1,253	3,279	1,468
1948-49	14,700	2,008	7,609	5,083
1949-50	28,500	2,617	13,216	12,667
1950-51	25,700	1,983	8,184	15,533
1951-52	32,900	2,675	7,350	22,875
1952-53	30,400	1,417	5,841	23,142
1953-54	36,800	1,118	6,069	29,613
1954-55	33,000	728	5,829	26,443
1955-56	37,500	683	4,951	31,863
1956-57	42,700	838	5,564	36,298
1957-58	39,200	781	5,083	33,336
1958-59	48,900	510	6,515	41,875
1959-60	41,900	684	6,608	34,608

Source: U. S., Department of Agriculture, Florida,
Crop and Livestock Reporting Service, Florida Vegetable
Crops, Annual Statistical Summaries, 1948-60.

TABLE 20.--Cucumber acreage, by seasons and areas, Florida,
1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	11,340	3,627	6,876	837
1929-30	12,100	3,960	7,493	647
1930-31	9,650	3,343	5,589	718
1931-32	7,300	2,467	4,254	579
1932-33	5,600	1,700	3,175	725
1933-34	5,000	1,250	2,675	1,075
1934-35	5,100	1,033	3,034	1,033
1935-36	5,700	940	3,310	1,450
1936-37	5,600	1,625	2,950	1,025
1937-38	7,000	1,050	5,050	900
1938-39	7,600	1,667	5,066	867
1939-40	8,200	2,017	5,016	1,167
1940-41	8,800	1,533	6,084	1,183
1941-42	9,700	1,417	6,766	1,517
1942-43	6,500	1,133	4,009	1,358
1943-44	6,300	1,650	3,200	1,450
1944-45	7,700	3,525	2,900	1,275
1945-46	11,200	3,947	5,251	2,002
1946-47	14,750	3,433	7,159	4,158
1947-48	14,600	3,692	6,841	4,067
1948-49	12,850	3,900	5,975	2,975
1949-50	14,300	3,108	7,559	3,633
1950-51	14,300	2,823	6,424	5,053
1951-52	15,600	4,083	6,149	5,368
1952-53	18,500	3,600	6,030	8,870
1953-54	18,700	4,650	5,595	8,455
1954-55	16,100	3,125	5,090	7,895
1955-56	16,000	2,457	5,191	8,352
1956-57	18,850	3,412	5,811	9,627
1957-58	18,150	3,130	5,310	9,710
1958-59	15,050	2,148	5,244	7,658
1959-60	16,600	2,405	4,995	9,220

Source: U. S., Department of Agriculture, Florida,
Crop and Livestock Reporting Service, Florida Vegetable
Crops, Annual Statistical Summaries, 1929-60.

Eggplant.--Acreage of eggplant has more than doubled since 1928-29 (Table 21). Area 1 had little acreage change. Area 2 had a sizeable acreage increase, but the maximum acreage reached was not maintained. Area 3 had an acreage increase that has kept it in first place since the 1949-50 season.

Endive-escarole.--Acreage of these items is shown in Table 22. Areas 2 and 3 share the acreage, and Area 1 has none. Area 3 had no reported acreage until 1935-36, but ended with over 70 per cent of the state total in 1959-60.

Lettuce.--Florida has difficulty in growing the varieties of lettuce in greatest demand. This crop has never been very important in Florida, but acreage has increased (Table 23). Area 1 no longer produces lettuce. Area 2 has produced consistently with relatively little variation. Area 3 had no acreage as late as 1936-37, but has planted amounts equal to that of Area 2 in recent years.

Green peas.--Green pea acreage was reported from 1928-29 until the 1948-49 season (Table 24). The demand for fresh-market green peas fell when improved processed peas, especially frozen ones, were introduced. (With reduced acreages, the Crop Reporting Service discontinued annual reports on

TABLE 21.--Eggplant acreage, by seasons and areas, Florida, 1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	1,320	366	438	516
1929-30	1,680	321	788	571
1930-31	1,800	383	934	483
1931-32	1,950	284	832	834
1932-33	2,450	282	1,136	1,032
1933-34	2,050	241	1,018	791
1934-35	1,500	206	788	506
1935-36	1,100	236	328	536
1936-37	1,450	195	785	470
1937-38	1,800	298	949	553
1938-39	2,100	167	1,191	742
1939-40	1,450	75	795	580
1940-41	1,900	278	744	878
1941-42	2,350	267	1,166	917
1942-43	1,950	150	650	1,150
1943-44	3,500	175	1,800	1,525
1944-45	3,250	300	1,250	1,700
1945-46	3,900	240	1,680	1,980
1946-47	3,500	317	1,541	1,642
1947-48	3,330	160	1,470	1,700
1948-49	3,300	191	1,668	1,441
1949-50	2,600	158	1,009	1,433
1950-51	2,200	212	926	1,062
1951-52	2,550	216	893	1,441
1952-53	2,800	263	1,049	1,488
1953-54	2,400	217	941	1,242
1954-55	2,550	255	940	1,355
1955-56	2,950	358	929	1,663
1956-57	2,700	367	691	1,642
1957-58	2,900	376	973	1,551
1958-59	2,900	320	840	1,740
1959-60	3,200	350	995	1,855

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1929-60.

TABLE 22.--Endive and escarole acreage, by seasons and areas, Florida, 1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	500	. .	500	. .
1929-30	460	. .	460	. .
1930-31	850	. .	850	. .
1931-32	700	. .	700	. .
1932-33	700	. .	700	. .
1933-34	700	. .	700	. .
1934-35	650	. .	650	. .
1935-36	700	. .	600	100
1936-37	900	. .	900	. .
1937-38	1,000	. .	925	75
1938-39	1,000	. .	910	90
1939-40	1,350	. .	1,200	150
1940-41	1,000	. .	700	300
1941-42	1,200	. .	900	300
1942-43	1,450	. .	1,200	250
1943-44	2,350	. .	1,350	1,000
1944-45	2,800	. .	1,200	1,600
1945-46	2,500	. .	1,050	1,450
1946-47	2,700	. .	1,000	1,700
1947-48	3,100	. .	1,100	2,000
1948-49	3,000	. .	1,050	1,950
1949-50	3,600	. .	1,100	2,000
1950-51	4,700	. .	1,050	3,650
1951-52	4,800	. .	1,500	3,300
1952-53	4,000	. .	1,600	2,400
1953-54	4,500	. .	1,550	2,950
1954-55	4,600	. .	1,450	3,150
1955-56	4,800	. .	1,500	3,300
1956-57	5,700	. .	1,500	4,200
1957-58	5,500	. .	1,600	3,900
1958-59	6,400	. .	1,700	4,700
1959-60	6,200	. .	1,750	4,450

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1929-60.

TABLE 23.--Lettuce acreage, by seasons and areas, Florida,
1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	1,500	100	1,400	. .
1929-30	1,100	100	1,000	. .
1930-31	1,600	150	1,350	100
1931-32	1,000	100	900	. .
1932-33	950	. .	950	. .
1933-34	1,100	. .	1,000	100
1934-35	900	. .	900	. .
1935-36	550	. .	550	. .
1936-37	800	125	675	. .
1937-38	900	125	700	75
1938-39	1,000	125	775	100
1939-40	2,000	100	1,645	355
1940-41	2,500	50	1,450	1,000
1941-42	3,500	75	2,775	650
1942-43	2,500	50	2,075	375
1943-44	2,450	. .	1,850	600
1944-45	1,400	. .	1,050	350
1945-46	1,800	40	2,110	350
1946-47	2,200	50	1,425	725
1947-48	1,700	50	1,210	440
1948-49	1,800	40	1,240	600
1949-50	2,400	50	1,225	1,125
1950-51	2,600	25	1,475	1,100
1951-52	2,200	50	1,275	875
1952-53	3,300	. .	1,600	1,700
1953-54	3,300	. .	1,800	1,500
1954-55	4,100	. .	2,340	1,760
1955-56	4,300	. .	2,525	1,775
1956-57	3,700	25	1,700	1,975
1957-58	3,700	. .	2,200	1,500
1958-59	3,200	. .	1,550	1,650
1959-60	3,300	. .	1,415	1,885

Source: U. S., Department of Agriculture, Florida,
Crop and Livestock Reporting Service, Florida Vegetable
Crops, Annual Statistical Summaries, 1929-60.

TABLE 24.--Green pea acreage, by seasons and areas, Florida, 1928-29 to 1948-49

Season	Florida	Area 1	Area 2	Area 3
1928-29	1,350	100	950	300
1929-30	700	. .	400	300
1930-31	2,000	. .	700	1,300
1931-32	3,800	. .	800	3,000
1932-33	3,600	. .	1,000	2,600
1933-34	4,800	. .	700	4,100
1934-35	5,000	. .	400	4,600
1935-36	8,200	. .	400	7,800
1936-37	6,200	. .	300	5,900
1937-38	6,200	. .	200	6,000
1938-39	5,000	. .	200	4,800
1939-40	5,000	. .	200	4,800
1940-41	3,000	200	300	2,500
1941-42	3,500	300	400	2,800
1942-43	1,500	100	200	1,200
1943-44	2,500	100	400	2,000
1944-45	2,600	200	600	1,800
1945-46	1,600	150	800	650
1946-47	1,350	100	450	800
1947-48	600	75	325	200
1948-49	400	20	180	200

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1929-49.

English peas.) Area 3 had most of the acreage during most of the time the crop was reported.

Peppers. The acreage of peppers shows an increasing trend (Table 25). It is a crop that has been grown regularly in all three areas. Area 1 has always had the smallest acreage, but the amount has increased. Area 2 pepper acreage increased from 1946 through 1955, but has since declined. Area 3 acreage, fairly uniform until about 1950, has increased in recent years.

Irish potatoes.--Irish potato acreage was 22,000 in 1928-29, reached 54,300 in 1956-57, but dropped off to 37,400 by 1959-60 (Table 26). Areas 1 and 3 each started with less than 3,000 acres, but Area 3 increased to 23,560 and ended with 10,830. Area 1 acreage remained around 3,000 or less. Area 2 has had the largest acreage of Irish potatoes most of the time.

Squash.--This is a crop for which acreage has been reported only since about the time English peas were deleted from the reports. It was first reported in 1947-48, with 7,900 acres, and by 1959-60 there were 12,600 acres (Table 27). Area 3 has had the largest squash acreage and it has increased steadily in that area.

TABLE 25.--Pepper acreage, by seasons and areas, Florida,
1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	5,650	300	2,225	3,125
1929-30	6,550	417	2,704	3,429
1930-31	8,200	450	3,567	4,183
1931-32	8,050	333	3,647	4,070
1932-33	8,300	292	3,781	4,227
1933-34	6,000	408	2,859	2,733
1934-35	7,700	400	4,225	3,075
1935-36	6,500	400	2,425	3,675
1936-37	7,200	333	2,959	3,908
1937-38	7,400	325	3,950	3,125
1938-39	7,300	217	4,041	3,042
1939-40	6,200	300	3,425	2,475
1940-41	7,200	367	3,266	3,567
1941-42	6,500	383	3,394	2,723
1942-43	7,100	375	2,850	3,875
1943-44	8,950	453	3,544	4,753
1944-45	9,350	657	3,666	5,027
1945-46	11,100	507	5,486	5,107
1946-47	10,600	508	5,459	4,633
1947-48	11,250	690	6,320	4,240
1948-49	10,750	1,058	5,309	4,383
1949-50	14,300	1,258	6,459	6,583
1950-51	11,200	1,400	4,875	4,925
1951-52	10,700	1,283	4,159	5,258
1952-53	12,800	1,367	5,191	6,242
1953-54	13,850	1,598	6,049	6,203
1954-55	13,800	1,465	5,455	6,880
1955-56	13,400	913	4,889	7,598
1956-57	14,600	1,223	4,544	8,833
1957-58	11,500	1,192	3,116	7,192
1958-59	14,100	748	3,904	9,448
1959-60	13,400	1,410	3,200	8,790

Source: U. S., Department of Agriculture, Florida,
Crop and Livestock Reporting Service, Florida Vegetable
Crops, Annual Statistical Summaries, 1929-60.

TABLE 26.--Irish potato acreage, by seasons and areas, Florida, 1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	22,000	2,613	17,032	2,355
1929-30	31,000	5,600	22,800	2,600
1930-31	27,000	5,237	18,988	2,775
1931-32	21,500	3,700	15,700	2,100
1932-33	17,000	2,400	12,825	1,775
1933-34	23,500	2,800	16,115	4,585
1934-35	24,800	2,750	16,275	5,775
1935-36	24,500	2,400	15,700	6,400
1936-37	31,300	3,800	17,550	9,950
1937-38	31,400	2,867	16,266	12,267
1938-39	26,700	2,767	13,816	10,117
1939-40	25,600	2,500	13,300	9,800
1940-41	26,800	3,050	13,950	9,800
1941-42	25,000	3,150	13,150	8,700
1942-43	26,600	3,200	13,750	9,650
1943-44	28,600	3,200	14,450	10,950
1944-45	31,100	3,400	13,650	14,050
1945-46	35,300	3,623	14,064	17,613
1946-47	23,100	2,533	9,934	10,633
1947-48	20,700	2,325	10,500	7,875
1948-49	20,600	1,033	10,334	9,233
1949-50	23,600	1,578	11,779	10,243
1950-51	23,500	1,433	13,284	8,783
1951-52	29,800	1,792	16,416	11,592
1952-53	41,500	3,098	20,854	17,548
1953-54	32,800	2,668	18,069	12,063
1954-55	38,000	2,868	22,094	13,038
1955-56	41,700	2,975	22,950	15,775
1956-57	54,300	3,475	27,265	23,560
1957-58	44,400	3,311	26,288	14,801
1958-59	37,100	1,927	22,576	12,597
1959-60	37,400	2,310	24,260	10,830

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1929-60.

TABLE 27.--Squash acreage, by seasons and areas, Florida,
1947-48 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1947-48	7,900	433	3,134	4,333
1948-49	9,000	850	3,425	4,725
1949-50	10,800	900	4,050	5,850
1950-51	10,800	850	3,800	6,150
1951-52	10,600	817	3,191	6,592
1952-53	10,100	1,058	3,334	5,708
1953-54	9,800	1,147	3,231	5,422
1954-55	10,700	1,200	2,975	6,525
1955-56	11,400	1,100	3,225	7,075
1956-57	10,900	1,275	2,775	6,850
1957-58	10,600	1,040	3,055	6,505
1958-59	11,000	858	2,809	7,333
1959-60	12,600	785	3,040	8,775

Source: U. S., Department of Agriculture, Florida,
Crop and Livestock Reporting Service, Florida Vegetable
Crops, Annual Statistical Summaries, 1948-60.

Strawberries.--Acreage of strawberries has been erratic by areas and has been declining in the state as a whole (Table 28). Area 1 acreage has decreased a great deal -- from nearly 3,000 acres to less than 200. Area 2 acreage increased until 1936-37 and then decreased from over 7,000 to less than 1,000. Area 3 acreage has been very unsteady, but has shown a marked increase during the past two seasons.

Tomatoes.--Tomato acreages are shown for the seasons 1928-29 through 1959-60 (Table 29). Tomato acreage was 38,700 in 1928-29, increased to 61,600 in 1955-56, and declined to 38,300 by 1959-60. Area 1 has never been important in tomato production. Area 2 had 12,866 acres in 1928-29, increased to 25,067 by 1952-53, and decreased to 14,338 in 1959-60. Area 3 acreage was as high as 43,846 in 1955-56 and was down to 23,794 in 1959-60.

Watermelons.--Acreage of this crop from 1928-29 to 1959-60 is shown in Table 30. Acreage of watermelons was 35,900 in 1928-29, increased to 98,000 in 1953-54, and was down to 73,000 in 1959-60. Area 1 had the largest watermelon acreage each season up to 1950-51. Area 2 has had the largest acreage in six of the past ten years. Area 3 had only 817 acres in 1928-29, increased to over 8,000 by 1955-56, and had 7,325 acres in 1959-60. It has had the largest percentage increase in acreage.

TABLE 28.---Strawberry acreage, by seasons and areas, Florida, 1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	6,300	1,608	4,534	158
1929-30	8,800	2,638	6,074	88
1930-31	9,100	1,308	7,584	208
1931-32	7,800	892	6,766	142
1932-33	10,600	2,835	7,610	155
1933-34	8,400	1,275	6,950	175
1934-35	8,000	958	6,884	158
1935-36	8,900	958	7,784	158
1936-37	8,800	1,042	7,566	192
1937-38	7,500	1,008	6,384	108
1938-39	9,000	1,567	7,266	167
1939-40	7,200	1,118	5,914	168
1940-41	5,500	1,250	3,850	400
1941-42	5,000	633	3,284	83
1942-43	2,600	350	2,200	50
1943-44	1,400	167	1,091	142
1944-45	2,050	242	1,666	142
1945-46	2,800	267	2,341	192
1946-47	4,800	467	4,116	217
1947-48	4,200	208	3,984	8
1948-49	4,000	417	3,516	67
1949-50	5,400	525	4,800	75
1950-51	6,000	417	5,516	67
1951-52	4,500	383	4,034	83
1952-53	3,700	250	3,375	75
1953-54	2,600	142	2,391	67
1954-55	3,400	108	3,159	133
1955-56	3,700	175	3,400	125
1956-57	3,500	220	3,170	110
1957-58	2,000	200	1,690	110
1958-59	1,500	162	1,101	237
1959-60	1,400	175	825	400

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1929-60.

TABLE 29.--Tomato acreage, by seasons and areas, Florida,
1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	38,700	217	12,866	25,617
1929-30	31,260	150	16,405	14,705
1930-31	26,800	143	12,307	14,350
1931-32	23,700	67	10,216	13,417
1932-33	24,900	167	7,744	16,989
1933-34	30,500	250	10,700	19,550
1934-35	32,500	42	9,666	22,792
1935-36	32,600	233	9,384	22,983
1936-37	35,700	67	9,916	25,717
1937-38	41,300	. .	16,900	24,400
1938-39	38,400	100	13,900	24,400
1939-40	33,500	217	18,370	14,913
1940-41	27,000	350	14,150	12,500
1941-42	43,000	275	19,075	8,150
1942-43	24,800	375	16,275	8,150
1943-44	34,900	392	13,767	20,741
1944-45	32,500	225	10,250	22,025
1945-46	30,400	103	14,343	15,954
1946-47	30,650	108	14,033	16,509
1947-48	28,350	233	15,383	12,734
1948-49	38,800	125	22,175	16,500
1949-50	42,200	133	21,933	20,134
1950-51	50,200	67	24,867	25,266
1951-52	53,500	100	23,675	29,725
1952-53	57,400	167	25,067	32,166
1953-54	57,400	517	22,667	34,216
1954-55	56,500	417	19,342	36,741
1955-56	61,600	172	17,582	43,846
1956-57	60,200	227	18,072	41,901
1957-58	52,400	587	18,787	33,026
1958-59	46,300	282	16,592	29,426
1959-60	38,300	168	14,338	23,794

Source: U. S., Department of Agriculture, Florida,
Crop and Livestock Reporting Service, Florida Vegetable
Crops, Annual Statistical Summaries, 1929-60.

TABLE 30.--Watermelon acreage, by seasons and areas, Florida, 1928-29 to 1959-60

Season	Florida	Area 1	Area 2	Area 3
1928-29	35,900	20,652	14,431	817
1929-30	34,700	20,442	13,831	427
1930-31	31,000	16,552	14,211	237
1931-32	28,500	13,767	14,316	417
1932-33	22,500	10,447	11,756	297
1933-34	23,400	14,550	8,700	150
1934-35	20,000	12,050	7,450	500
1935-36	16,000	8,767	6,966	267
1936-37	19,500	11,833	7,434	233
1937-38	22,500	13,600	8,500	400
1938-39	22,600	15,933	6,534	133
1939-40	23,500	18,217	5,116	167
1940-41	25,500	19,167	6,166	167
1941-42	22,000	15,900	5,800	300
1942-43	12,500	8,017	4,216	267
1943-44	25,500	15,983	9,334	183
1944-45	39,000	26,467	12,066	467
1945-46	47,000	29,925	16,475	600
1946-47	47,000	25,883	20,684	433
1947-48	45,000	23,709	20,733	558
1948-49	59,000	34,534	24,083	383
1949-50	68,000	39,450	27,900	650
1950-51	57,000	26,050	29,650	1,300
1951-52	72,000	33,100	36,400	2,500
1952-53	93,000	44,977	41,856	6,167
1953-54	98,000	47,642	45,066	5,292
1954-55	88,000	41,827	39,606	6,567
1955-56	91,000	38,867	43,466	8,667
1956-57	95,000	38,942	48,041	8,017
1957-58	95,000	42,825	46,000	6,175
1958-59	72,000	32,655	33,170	6,175
1959-60	73,000	34,325	31,350	7,325

Source: U. S., Department of Agriculture, Florida, Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1929-60.

CHAPTER III

CONDITIONS PRECEDING THE ESTABLISHMENT OF STATE FARMERS' MARKETS IN FLORIDA

Most authors writing on the subject of fresh-produce marketing and its early development describe conditions and practices, which, when compared with today's methods, make it apparent that chaos and confusion prevailed. Suspicion, distrust, and unfair advantage were described as producers' attitudes toward middlemen. Disorganized, stupid, and deceitful were expressed as dealers' feelings for producers and shippers.

Many of the methods of sales, types of middlemen, and distribution patterns which were prevalent years ago are relatively unimportant today. Several phases of handling operations have been eliminated as distribution processes have become more streamlined and integrated.

The major changes between fresh-produce marketing of old and that of today should be pointed out before going into the details of why farmers' markets were established in Florida. The most pronounced and fundamental changes

were centered around improved information on available supplies and the tendency toward removing the price determination center from central wholesale markets to the various production or storage areas.¹ These changes were closely associated with buying f.o.b. shipping point, reduced risks, and one-owner distribution.

Very little history of specific vegetable-marketing methods and problems in Florida has been recorded. Some of the available history of produce marketing in this state has been incorporated in this report. Much of the reference material used applied to the national vegetable-marketing situations and not to any particular state, but Florida growers were shipping and selling vegetables under the same conditions. It is assumed that many of the national conditions and practices also prevailed in Florida.

It is difficult today to visualize conditions as they existed in the produce industry years ago; but, with numerous quotations from authorities of the period concerned, an attempt is made here to present some of the past history of the industry.

Reference should be made to the fact that most

¹G. S. Shepherd, Marketing Farm Products (Ames, Iowa: Iowa College Press, 1946), p. 40.

available literature vigorously defends the grower and his position. Only an occasional defense of dealers or handlers can be found. Numerous selections from available material have been included to present the mood, thinking, and sentiment of growers as they strove to achieve a stronger position in produce marketing.

Insufficient Standardization

Uniformity and standardization concepts for fresh fruits and vegetables, including improved quality maintenance, are the greatest accomplishments for industry progress since development of long-distance transportation and refrigeration. Many students of marketing attribute the handling of produce by fewer middlemen on its way to consumers, and the direct purchase distribution² of today, to standardization and market news.³ The need for standard-

²"Chain Stores Shortening Farm-to-Mart Channels," Tampa Tribune, January 30, 1960, p. 4-A. This was a report of a news release issued by the U. S. Department of Agriculture, Agricultural Marketing Service.

³"Commission dealing as carried on by Commission men . . . is almost always found when marketing is crude and undeveloped, when shipments vary greatly in quality, variety, and methods of packing, when transportation facilities are slow and not dependable, and when market news is inadequate. Under such conditions, dealers are usually

ization was recognized early and growers were encouraged to pay close attention to the appearance of their products. In Farmers' Bulletin No. 707, published in 1916, appears the following statement: " . . . any fruit or vegetable of desirable variety, well grown, carefully harvested, properly graded, packed and shipped is more than half sold."⁴

Some of the early writers, when discussing the deplorable practices of growers sending to market "the good with the bad," "this variety with that variety," "this size with that size," etc., went so far as to predict that grade

unwilling to undertake the risk of buying the product outright." F. E. Clark and C. P. Clark, Principles of Marketing (3rd ed.; New York: The Macmillan Co., 1942), p. 99; "Improper grading and preparation for market are undoubtedly the most serious weaknesses of marketing at country points The principal reasons why dealers handled on commission rather than buying outright from country points were as follows: Goods as shipped from the country were of much more heterogeneous character as to quality, variety, and method packing than they are today; transportation facilities had not been developed so as to carry perishables without frequent deterioration and decay; and trade methods and facilities for gathering and disseminating market information in wholesale markets were not sufficiently developed to allow wholesale traders to measure or forecast market conditions. For these reasons, the outright purchase of commodities in large lots by dealers in cities involved too great a risk, and the risk had to be shifted back to the grower or country shipper." L. D. H. Weld, The Marketing of Farm Products (New York: The Macmillan Co., 1916), p. 82.

⁴U. S., Department of Agriculture, Farmers' Bulletin No. 707 (Washington: U. S. Government Printing Office, 1916), pp. 1-2.

standards would come, that many costs as well as evils would be eliminated, and that some of the marketing processes would become unnecessary.⁵

Grading

The first grading of record was done in the city markets by commission men because much of the produce coming into the markets was of poor quality and failed to meet the demands of the retail trade.⁶ In 1932, a horticulturist at the University of Florida wrote:

Too few realize that the horticultural industry of Florida is suffering an economic loss of millions of dollars annually due to poorly graded produce packed in ill-adapted packages and carelessly stowed in cars.

.....
Data have been collected from time to time in an effort to classify accurately the different reasons for the apparent decline in popularity of Florida produce. All of these have indicated the importance of correct methods of grading and packing, two items that have received relatively little attention in Florida.⁷

⁵J. T. Horner, Agricultural Marketing (New York: John Wiley & Sons, Inc., 1925), p. 17.

⁶U. S., Department of Agriculture, Standardization and Inspection of Fresh Fruits and Vegetables, Agricultural Marketing Service, Miscellaneous Publication No. 604 (Washington: U. S. Government Printing Office, 1956), p. 6.

⁷M. R. Ensign, Grading, Packing, and Stowing Florida Produce, Agricultural Experiment Station Bulletin 254 (Gainesville, Florida: University of Florida, 1932), pp. 3-4.

Vegetable grading -- for example, the grading of tomatoes -- is the process of grouping together those tomatoes of the same variety that most nearly resemble each other as to shape, size, color, ripeness, and quality. For a long time, growers who graded were penalized, as they sold fewer packages but received no higher price because their shipments of vegetables became "lost" in the market when mixed with packages of their neighbors.⁸

Packing

Credit for the first efforts to standardize containers and to build a reputation for packing high-quality products with an honest pack was given to growers who labeled each package with their name and address.⁹ The large number of different sizes and types of containers has been a problem from the start, as each production area wanted to be unique. Today, many commodities go to market in several assorted containers, but the number has been reduced considerably.

⁸If grading was attempted by one grower, his product was usually lost in the mass and finally sold at about the prevailing price for the product of his locality. The commission merchant could not always find a premium market for a small lot of better-than-average goods which he did not know was coming. W. A. Sherman, Merchandising Fruits and Vegetables (New York: A. W. Shaw Company, 1928), p. 54.

⁹U. S., Department of Agriculture, Standardization . . . , p. 6.

Deliberate overpacking of containers to gain "buyer favor" was a prevalent practice reported to have caused extensive damage to the goods and requiring added handling costs due to container breakage. Some writers made an issue of the extravagant amount of produce growers were "giving" as a premium to attract buyers. Florida research conducted in 1932 on the effects of a bulged pack indicated lettuce crates averaged 60 per cent overweight and cabbage, 25 per cent. Tomatoes showed a 53 per cent weight loss due to crushing and decay, and "false packs" were resorted to in an effort to overcome the bulge handicap. It was reported that the bulge pack was costing Florida growers millions of dollars annually in direct and indirect charges.¹⁰

Maintenance of Quality in Marketing Channels

Market Preparation

The term "market preparation" is used to include those activities associated with protecting quality and improving the appearance of such products, but not changing their original form or composition. Functions such as pre-cooling, washing, waxing, wrapping, brushing, trimming,

¹⁰Ensign, Grading . . . , pp. 16-22.

coloring, etc., were not generally available until fairly recently.

To illustrate some of the changes that have taken place in market preparation, celery and tomatoes have been selected as case histories.¹¹ Early celery shipments from Florida were transported "in the rough," which was a term used to describe untrimmed and unwashed stalks with much of the roots intact. It was cut and packed in the field. Upon arrival in city markets, jobbers had to trim, wash, and wrap each stalk in parchment paper before it was an acceptable unit for retail sale. The parchment paper was used to reduce wilting and to protect the product.

In 1917, research showed that celery could be trimmed, washed, and precooled before shipment with better results. Soon market preparations included packing-house operations for precooling purposes. Later, most of the trimming, washing, grading, packing, and precooling was conducted in packing houses. Principal varieties grown had changed during this period from a golden blanché type to the green pascal type.

Today, much of Florida celery is again trimmed,

¹¹H. C. Thompson, Vegetable Crops, Vols. I and II (New York: McGraw-Hill Book Co., Inc., 1923 and 1931).

graded, and packed in the field on "mule train" mobile packing sheds, with washing and precooling being done in packing houses after the celery in the crate is ready for shipment. Wrapping is again commonplace, but is now done with transparent plastic or cellophane. Much of the wrapping is done by city handlers, although a small amount is wrapped at shipping point.

Tomatoes from Florida received market preparation in packing houses from the beginning of commercial production. They were picked green, sorted for size and condition, wrapped in special tomato paper, packed in four-quart till baskets, and placed in crates that contained six baskets. The crates were closed with a bulged top. Damage and disease became so great that, after picking, the tomatoes had to be put into a ripening room so that all unmarketable fruit could be removed before shipment. Only "breaking" fruit were selected, wrapped, packed, and shipped. Grading was begun in 1917.

In 1920, research showed that wrapping tomatoes in paper prevented proper ripening, delayed cooling, interfered with quick inspection, and favored the development of disease. It was also expensive. Later, the ripening-room operations were transferred to the city handlers. This

transition took place rapidly after the use of ethylene gas was found helpful in the ripening process. The paper wrappers continued in use. The six-basket crate gave way to the lug box, but the use of wrappers continued as a standard practice. During World War II, the shortage of labor and paper stopped the wrapping of tomatoes and it was discovered that they carried very well. Revival of wrapping was attempted after the war, but it was of short duration. More recently the lug box has given way to wire-bound wooden boxes. Washing and waxing mature green tomatoes before shipment has become a common practice.

A relatively new tomato activity known as the "vine-ripe industry" is being watched with considerable interest. This practice involves harvesting "breaker" tomatoes, grading, labeling each fruit, wrapping in paper or placing in individual paper cups and packing in small (8- to 20-pound) cardboard boxes for shipment.

Refrigeration

Proper and effective use of refrigeration is the backbone around which the fresh fruit and vegetable industry has been built. Many costly mistakes have been made in its application. Some of these mistakes were excusable before commodity temperature tolerances were established,

but many resulted from carelessness and lack of prudence. Proper and constant refrigeration is essential if most vegetable products are to arrive at distant markets in the peak of condition and with the most appealing appearance.

While our knowledge of refrigeration is still incomplete and all decay or deterioration cannot be absolutely controlled, it is possible to obtain satisfactory results in most shipments. However, this has not always been true. Some researchers have found an average of 35 to 40 per cent decay in perishable shipments.

Improper Pricing

The level of prices which growers receive is oftentimes hard to explain. Demand and supply are important, but cannot stand alone. Buyer and seller psychology on values and anticipations are always recognized. Standardization, appearance, variety, and volume enter into price determinations. We can be certain, however, that a prime essential in price determination is for some buyer and seller to get together. It is essential, because no matter how great may be the desire of one to sell and the other to buy, no exchange can take place until each knows the desires of the other.

Before the era of f.o.b.-shipping-point selling, it was in the city wholesale trade where business was most highly organized, and where well-informed expert dealers most freely exchanged opinions with regard to the forces affecting demand and supply. As a result, wholesale prices were more susceptible to, and more accurately conformed to, the various elements affecting demand and supply than did either retail or farm prices. Wholesale prices, therefore, fluctuated more often than did either of the other two prices.¹² While wholesale prices fluctuated more often, grower prices have shown the widest fluctuation.

Nonuniformity of Prices to Growers

Nearly everyone who buys or sells has, at times, thought of himself as a good trader. At the same time, he is always interested in finding out if someone else has made a better deal, even if it does make him turn "green with envy." Vegetable growers who have trading strength through volume, who just happen to hit the market when supplies are low, or who maintain good market contacts, are generally those who receive the highest prices.

Prices are apt to vary more than condition and

¹²Weld, pp. 251-52.

appearance of products in the market. The literature is full of examples and explanations as to why this is true.

Beckman and Engle explain it this way:

In the agricultural field, the individual farmer has little or no voice in arriving at prices, but rather accepts those determined for him in the wholesale markets, frequently by world-wide forces of demand and supply.¹³

While Clark and Clark stated:

Pricing is an intricate process. Prices are determined in various ways, and the same product is often sold to different buyers at different prices. Moreover, prices to the same class of buyer may vary with the quantity purchased, the place of purchase, and the time of payment.¹⁴

Still another writer, discussing middlemen who develop new types of distribution which are more efficient, indicated that they " . . . can pay the cost of collecting and sorting and still sell at a lower price"¹⁵

Of course, there are also those prices paid which result from dishonest practices of fraud or misrepresentation.

¹³T. N. Beckman and N. H. Engle, Wholesaling Principles and Practices (Rev. ed.; New York: The Ronald Press Company, 1949), p. 288.

¹⁴Clark and Clark, p. 15.

¹⁵R. S. Vaile, E. T. Grether, and R. Cox, Marketing in the American Economy (New York: The Ronald Press Company, 1952), p. 137.

Lack of Sellers' Knowledge of Supply and Demand

Weld maintained that lack of knowledge of market conditions and prices was one of the major weaknesses of marketing at country points.¹⁶

Growers are pictured as being highly specialized in production but unable to master the arts of marketing because of time and distance. Sherman, when writing about commission men, put it this way:

The distant grower seldom, if ever, visited the market and usually knew nothing of market prices or of conditions of his goods on arrival except what the receiver chose to tell him. The inevitable happened. There was easy money for the unscrupulous man who could get goods sent to him on commission from afar. The industry became infested with a class of parasites who preyed upon the shipper and interfered with the business of the legitimate trader.¹⁷

Monopolistic Practices

Frequent references were made throughout the literature toward three areas where monopolistic practices have been prevalent. The first of these involved commission men, who set themselves up to do business either on commission or to buy outright for their own account. With their

¹⁶Weld, p. 251.

¹⁷Sherman, p. 38.

superior knowledge of markets, trends, demand, and supplies, they sold on commission during low or falling market conditions, but bought outright when market advances were anticipated. In this way, they tried to control returns to growers at low levels and sell goods they bought for high prices. This practice caused Sherman to classify it as " . . . the root of some of the worst evils of the commission business."¹⁸ Along this same line, commission men also frequently split a consignment and sold part on commission and took part on account. When they did this, they were able to set the overall price to the shipper as they pleased.¹⁹

A second method of monopoly, attempted at times, was for dealers to take advantage of short production periods and buy outright all the supplies possible to be traded for profit. On this subject, Nourse writes:

There has been a nebulous impression that some sort of monopoly existed, and that there have been, not infrequently, specific charges of combinations to raise prices to the public and depress prices to the producers, and of official price-making.²⁰

¹⁸Ibid., p. 20.

¹⁹Weld, p. 85.

²⁰E. G. Nourse, The Chicago Produce Market (Boston: Houghton Mifflin Company, 1918), p. 145.

The third area of monopolistic activities involved production area practices. Here, three types can be found. One buyer in a production area without competition is apt to use his monopoly powers. Several buyers band themselves together in collusion to establish uniform prices which all would pay at any given shipping point.²¹ The last type involves a majority of the output from a given area being restricted in marketing freedom. In this case, outside buyers tend to be discouraged from entering the local market because of the small volume available to them. In this connection, Myers wrote: "The disadvantages in bargaining power to the independent farmer are obvious."²²

Other Factors

Improper Practices of Buyers and Sellers

As the distance between producers and city market sales agents became greater, opportunities developed for both producers and sales agents to become dishonest in some of their activities. Local buyers and trucker-handlers

²¹Weld, p. 39; and Nourse, p. 145.

²²A. L. Myers, Agriculture and the National Economy, U. S. Senate Temporary National Economic Committee Monograph No. 23 (Washington: U. S. Government Printing Office, 1940), p. 19.

found situations which tempted them to stray from the straight and narrow path of complete honesty. Sherman found conditions at such a low level that he wrote: "The worst abuses which the produce business has ever known grew rapidly and naturally" ²³

Some of the practices commonly mentioned in marketing references as dishonest or abusive were those of commission men acting in dual capacities, either selling on commission or buying outright so that the shipper never knew how his goods were handled. Commission men were also accused of repacking consigned goods into smaller containers so that there were more containers to sell, but they made sure they only paid for the original number received. ²⁴

Nourse was very emphatic when he wrote:

. . . there can be no denying that there have been all too many cases in which produce merchants . . . have practiced fraud upon the producer ²⁵

Shipping-point buyers and dealers were accused of flagrantly misrepresenting grades when buying, misrepresent-

²³Sherman, p. 37.

²⁴G. H. Powell, Cooperation in Agriculture (New York: The Macmillan Co., 1918), p. 210.

²⁵Nourse, p. 240.

ing market conditions and prices, and of practicing collusion to fix prices.²⁶

Trucker-handlers, as distinguished from truckers who operate as common carriers, were not only accused of misrepresenting facts and conditions, but also of giving bad checks.²⁷

All of the complaints, however, were not exhausted on the middlemen. Many growers, also, were criticized for submitting to easy-money methods, if not plain dishonesty. Growers were reported to have prepared false and deceptive packs, deliberately shipped cull or junk merchandise, altered containers so that less goods were contained, but were mistaken for the larger containers, misrepresented goods as "best" when offered a cash sale, and were so irresponsible in grading and packing that f.o.b. buyers had to reserve the right to reject all purchases upon arrival when specifications were not met.²⁸

Selling Practices

Small vegetable growers have been notorious for using much credit and making few cash purchases in obtaining

²⁶Myers, p. 18.

²⁷Ibid.

²⁸Sherman, pp. 39 and 58.

farm supply items. This type of financing places them always in need of money to pay bills incurred in making essential purchases for necessities of life and production.²⁹ Many vegetable growers relinquished their rights to market their production themselves through conditions stipulated in credit terms.³⁰ This was particularly true when title to the vegetables passed to commission merchants in distant markets, where goods were unaccounted for over long periods.

The long periods of uncertainty involving consigned shipments to distant commission merchants, the distrust involved, the frequency with which the goods had not sold for enough to pay freight charges (when the grower was presented with a freight bill in addition to the disappearance of his vegetables) are credited as the main reasons for grower interest in establishing shipping-point fruit and vegetable markets for cash f.o.b. sales.³¹

²⁹F. E. Clark and L. D. H. Weld, Marketing Agricultural Products (New York: The Macmillan Co., 1932), p. 18.

³⁰Myers, p. 14.

³¹U. S., Department of Agriculture, Farmers' Produce Markets in the United States, Part III, Marketing Research Report No. 17 (Washington: U. S. Government Printing Office, 1952), p. 2.

Increased Use of Trucks

Another reason for the development of fruit and vegetable shipping-point markets was the advent of the motor truck as an important carrier of fresh fruits and vegetables.³² Most authors concur that the use of motor trucks was among the primary reasons for establishing shipping-point markets, but they are not unanimous in its position as a contributing factor.³³ It is certain, however, that shipping-point produce markets and the number of motor trucks both increased by considerable proportions in the same period of time (Tables 6 and 31).

Prior to the opening of shipping-point markets, it was customary for trucker-handlers to drive through vegetable areas buying a few packages here and there until the truck was loaded. Obtaining a truck load of vegetables by this method frequently required a day or more. The trucker-handler usually paid for the vegetables bought in cash and intended to resell at a profit in some distant city on a

³²Ibid.

³³The use of motor trucks was ranked as the number one factor for development of shipping-point fruit and vegetable auction markets. E. W. Cake, Some Facts concerning Country Fruit and Vegetable Auctions in Eastern Seaboard States, Cornell University Agricultural Experiment Station Bulletin No. 737 (Ithaca, N. Y.: Cornell University, 1940), p. 12.

TABLE 31.--Number of shipping-point fruit and vegetable markets in operation and volume sold in the United States at five-year intervals, 1913-48

Year	Markets Operating	Amount of Sales	
		Total	Average per Market
	(Number)	(Carlot Equivalent)	(Carlot Equivalent)
1913	4	352	88
1918	9	783	87
1923	15	2,199	147
1928	31	5,332	172
1933	59	16,776	284
1938	73	24,881	341
1943	82	44,214	539
1948	85	61,261	721

Source: U. S., Department of Agriculture, Farmers' Produce Markets in the United States, Part III, Marketing Research Report No. 17.

highly unsteady market before product deterioration had begun. The uncertainties of buying fresh vegetables and later selling at a higher price were great and even though the trucker-handler was better informed on market conditions than most growers, he still had to pay a price low enough to offset the risks involved.³⁴ In some cases today, truckers still obtain loads of produce by driving through the country and buying from several farmers until a load is obtained, but this is not the general rule. It is most common in melon marketing.

Motor trucks were quickly adapted to supplying less-than-carlot cities with fresh produce as well as supplying small dealers with mixed loads of assorted fruit and vegetable items. Facilities where motor trucks could load conveniently or could find a truck load available in one place were practically nonexistent prior to World War I. In the early days, most assembling and shipping facilities were located on the railroads, with limited access to motor trucks, and loading docks only for rail cars.

Shipping-point markets for fresh fruit and vegetables made the business of the produce trucker-handler much simpler. He could find a ready load of one or more items for which he

³⁴Clark and Clark, p. 99.

would pay cash and at the same time be able to increase his number of pay-load trips per year. Growers also liked the shipping-point markets because they could see what was going on and could take home cash for vegetables the day of harvest.

Lack of Farm Assembly Markets

One of the main marketing problems of a vegetable producer with only a few packages to sell per day, for only a few days of the year, was where to sell them. This problem became very acute when many small vegetable producers, each with only a few packages to sell, were all trying to sell at the same time. None could afford to haul their few packages very far. The large number of growers in some areas made it impossible for all to sell to local stores or consumers. The result was a temporary local surplus of products made up of many separate lots, most of which were different in some respect.

The records indicate that most producers of yesterday had no local markets where their products could be bought and shipped to other areas for profitable utilization. Many who were fortunate enough to be near railroads shipped to commission merchants in the larger cities. However, consignment selling was far from satisfactory and

always required long periods of uncertainty before disposition of the produce shipped was known. Some of the vegetable producers found it necessary to ship through local wholesale assemblers of fresh fruits and vegetables, who in turn sold on consignment; but this, too, was generally unsatisfactory. In 1911, the first shipping-point market (a strawberry auction market) was organized in the United States.³⁵ At the end of World War I, there were only 9 shipping-point markets in the nation. In 1928, there were 31 and, by 1950, the number had increased to 99.

It is interesting to note that between the late 1920's and the late 1940's, when shipping-point markets for fresh fruits and vegetables were almost tripling in number, wholesale assemblers of fresh fruit and vegetables at shipping points decreased by over 40 per cent (Tables 31 and 32).

The first shipping-point market for vegetables in Florida was organized in 1934 as a community vegetable auction at Wauchula.³⁶

Some of the reasons why shipping-point markets have been preferred by many growers and have increased in numbers over the years include (1) the desire for cash sales, (2) the

³⁵ U. S., Department of Agriculture, Farmers' Produce . . . , p. 5.

³⁶ Cake, p. 12.

increased use of trucks, (3) the rapid expansion of the industry, and (4) the relatively small size of the production unit, but the large number of independent growers.

TABLE 32.-- Wholesale assemblers of fresh fruit and vegetables in the United States, 1929, 1939, and 1948

Year	Assemblers
	(Number)
1929	3,809
1939	2,902
1948	2,137

Source: U. S., Department of Commerce, Bureau of Census, United States Census of Business, Wholesale Trade, 1948.

Florida Growers' Position

The situation confronting vegetable growers in Florida prior to the establishment of State Farmers' Markets has been reconstructed from discussions with many people who were closely associated with the industry at that time. Some of those interviewed were: Neil Rhodes, former Commissioner of the State Marketing Bureau, who spent 44 years with that organization; G. B. Hogan, Manager, Pompano State

Farmers' Market and former Assistant Director of State Markets; County Agents; and others.

Recalling the desperate situations vegetable growers encountered when trying to sell their products, Mr. Rhodes said that, after the items were harvested and packed for market, there were no buyers or handlers available, except local retail stores. The local stores could only handle small quantities and, once supplies had been purchased, no additional amounts were wanted until after the original merchandise had been sold. Mr. Rhodes went on to say that, after the 1929 Legislature created the State Agricultural Marketing Board, vegetable growers from all over the state brought or sent perishable products to his office for sale because the new act provided for locating markets and buyers. It was not the intent of the act that state employees actually receive the products and physically handle them but, if markets and buyers were to be found, many growers wanted their products to be the first sold.

Mr. Hogan explained how growers along the lower east coast would congregate in small clusters beside the railroad tracks or around a depot to await the shipment of their products on the trains. There were few, if any, buyers, and the growers in one group had no way of knowing how many

similar groups there were up and down the tracks, what items were to be shipped, or the quantities involved. Small-lot items were shipped by express and large lots were shipped in solid carlots.

There is little doubt that large-scale commercial vegetable growers of that time had but two choices in the sale of their products. They chose either a commission merchant in a distant city to sell their products on consignment, or they engaged a local shipping broker to ship their products for sale. In both cases, the shipments were headed for an uncertain future, with prices and market conditions unknown. It was customary to wait for ten days or two weeks before disposition was known. Many of the commission houses had traveling representatives, who visited growers in an effort to obtain greater quantities of goods on consignment. These commission-house representatives could only offer promises of service. The Atlantic Commission Company was probably one of the better known commission houses that employed field representatives extensively.

In his youth, the author helped his grandfather, who was a part-time station master at Kirkwood, Florida. It was normal for the vegetable growers around Kirkwood to

bring their products by horse and wagon to the railroad station, where they were either loaded and shipped in carlots, or each container received an express label for small-lot shipments. The author spent many hours filling out labels, gluing them on containers, and then, with the aid of a copper stencil, paint brush, and black ink, putting the sender's name and address on each container. Frequently, the growers would insist that they knew no one to send their vegetables to for sale and would ask the station master to ship them to someone who would sell them. He was always glad to help and kept a large blue book which contained the names and addresses of commission receivers and sellers. Many times the growers never knew where their products had been shipped. The station master never accepted a brokerage fee for finding selling agents for the growers. He accepted this as part of the station master's duties.

CHAPTER IV

ESTABLISHMENT AND OPERATION OF FARMERS' MARKETS IN FLORIDA

It is quite apparent from the preceding discussion of conditions existing in early vegetable marketing that many problems plagued growers. Some shipments returned only a demand to pay shipping charges. Without shipping, there was no chance for sale. The state of Florida began a program to help solve some of the marketing problems that were unique from the beginning. The purpose and philosophy of this program are described in the following quotation:

The fundamental purpose of Florida's system of State Farmers' Markets is to provide a convenient, dependable outlet through which farmers may market their wares and receive cash at the time of sale.

Recognizing that getting his crops to market and getting the best possible return, is the paramount problem of the large number of independent farmers in Florida, Nathan Mayo, Commissioner of Agriculture, . . . understood [undertook] the study of ways and means of developing better marketing facilities in the farming areas of the state.

Since other states provided no suitable pattern upon which to build a marketing system adequate to meet the needs of Florida, Commissioner Mayo

sought and secured legislative authority to develop a "tailor-made" marketing system to aid in the development of Florida agriculture.

Thus, the State Agricultural Marketing Board came into being, with authority to build and operate suitable farmers' markets throughout the state -- but that the state would not pay for the operation of such markets. Further, it was determined that the state would not "go into business" in competition with private agencies offering sound, adequate service to producers of agricultural products.¹

Legislative History and General Provisions

In the opening address of the Governor before the joint assembly of the Florida Legislature on Wednesday, April 3, 1929, the Honorable Doyle E. Carlton stated: "The greatest problem in connection with agriculture is marketing. More attention must be given to the home market."²

State Agricultural Marketing Board

Shortly thereafter, Senate Bill No. 245 was introduced. This bill provided for the creation of the State Agricultural Marketing Board, to be composed of the Governor, the Commissioner of Agriculture, and the State Marketing

¹Florida, 27th Biennial Report of the Department of Agriculture, 1942 (Tallahassee, Florida), p. 27.

²Florida, Journal of the Senate, 1929 (Tallahassee, Florida), p. 5.

Commissioner. It also defined the duties of the Board to:

1. Further extend the activities of the State Marketing Bureau.
2. Aid, promote, and foster agricultural and marketing associations.
3. Locate markets and buyers.
4. Instruct in the standardization, grading, packing, processing, loading, refrigeration, routing diversion, and distribution of farm products.
5. Carry on research work in marketing.
6. Provide any other information and assistance necessary to efficient selling of farm products.

Authorization was also given to employ such assistants to the State Marketing Commissioner as were needed.³

Senate Bill No. 245 was passed on May 9, 1929, with no dissenting votes. The House in turn also passed the bill and the Governor signed it on May 29, 1929 (Appendix page 406).

The Annual Report of the Florida Department of Agriculture, written in 1930, listed five marketing specialists with the State Marketing Bureau who had been appointed under the authority of the Agricultural Marketing Board Act.

³Florida, Laws of Florida, 1929 General Laws, Volume 1, Chapter 13809, No. 245 (Tallahassee, Florida), p. 630.

There was a specialist for fruits and vegetables, livestock and field crops, poultry, dairying, and market news. The annual report singled out the State Marketing Bureau for special emphasis and had the following comment on its importance:

It is through the Division of Marketing that the Department has its most direct contact with the farmers of the State. Until 1929, its only method of serving the farmer was through instruction by the Commissioner, by bulletins, by telegraphic reports, and by correspondence. The Legislature of 1929 extended the scope of its operations to include five new departments, each of which is under a specialist whose whole time is devoted to meeting the farmers producing those things which he is to help in marketing. These five services are: 1. Marketing fruits and vegetables, 2. livestock and field crops, 3. poultry, 4. dairying, and 5. milk inspection.⁴

The State Legislature in 1933 amended the State Agricultural Marketing Board law retaining the original provisions but redefining duties and obligations to include purchasing suitable sites, erecting assembling plants, and operating markets. These markets were to be equipped to handle, process, store, and refrigerate all farm products as necessary, or to mix feeds. The duties included purchasing and holding available supplies for the use of various

⁴Florida, 21st Biennial Report of the Department of Agriculture, 1930 (Tallahassee, Florida), p. 7.

state institutions, hiring managers and other staff members necessary to operate the markets, and collecting service charges sufficient to cover operational expenses (Appendix page 408). The Governor signed this act amending the State Agricultural Marketing Board law on June 10, 1933.⁵

Probably one of the reasons for amending the State Agricultural Marketing Board law requiring construction and operation of farmers' markets, was due to a statement in the State Marketing Bureau's biennial report published a few weeks prior to the 1933 session of the Florida Legislature. It reads:

The demand for Bureau help increased so rapidly and so extensively [following provision of the 1929 Agricultural Marketing Board law] that we had our office practically filled with express shipments of various kinds and received many cars of watermelons, potatoes, citrus fruits, and other commodities. After actually selling and handling various products by the State Marketing Bureau, it was decided that a more efficient and generally more extensive service could be provided by the Bureau through encouragement of grades, packs, and shipping practices in general; through acting in an advisory capacity to the grower and shipper, providing him with all the marketing information that he might need, and in fact, supplying him with all the necessary data sufficiently that he could close his own transaction, knowing fully how much competition he had in the products he was offering, what the

⁵Florida, Laws of Florida, 1933 General Laws, Volume 1, Chapter 15860, No. 5 (Tallahassee, Florida), p. 22.

markets to which he intended to consign or sell were receiving, what the prevailing prices were at shipping point and at destinations, what the prevailing market conditions were in all the various markets, whether the dealer with whom the transaction was to be consummated was reliable; -- than to become a state-wide marketing organization in competition with every other individual or agency in business in the State of Florida. The wisdom of that decision has been well demonstrated.⁶

Apparently, the Commissioner of that date, the late Mrs. L. M. Rhodes, felt that the Agricultural Marketing Board law encouraged Florida farmers to expect services of a nature which the State Marketing Bureau was not designed to perform. In his Biennial Report of 1935, he expressed the opinion that the state should not become involved or obligated in actual commerce as a competitor to private agencies. He questioned the desirability of a division of the State Department of Agriculture directly handling shipments of farm products, any more than the Attorney General had the responsibility of handling a law practice, or the Railroad Commissioner of operating a transportation system in competition with private enterprises of the state.⁷

⁶Florida, 8th Biennial Report of Florida State Marketing Bureau, March, 1933 (Jacksonville, Florida), pp. 11-12.

⁷Florida, 9th Biennial Report of Florida State Marketing Bureau, March, 1935 (Jacksonville, Florida), p. 4.

State Farmers' Markets

It was in the middle of the 1934-35 season, at Sanford, that the first State Farmers' Market began operation with dealers and brokers renting space for buying and selling produce. State Farmers' Markets have been in continuous operation since that time. In 1939, the State Legislature passed an act making it mandatory that the Agricultural Marketing Board establish and operate certain houses to wash and grade citrus.⁸ This act was permitted to become law without the signature of the Governor (Appendix page 410). This law required citrus washing and grading houses to be established in specific counties at definite locations: One in Duval County where U. S. Highways Number 1 and 17 intersected, one in Columbia County where U. S. Highways Number 41 and 441 intersected, and one in Levy County adjacent to U. S. Highway Number 19. These citrus houses were to be opened on December 1, 1939, and would continue operation until June 1, 1940. Each year, thereafter, the same schedule would be followed. Additional citrus houses could be established at the discretion of the Agricultural Marketing Board. An appropriation of \$50,000 was provided,

⁸Florida, Laws of Florida, 1939 General Laws, Volume 1, Chapter 19472, No. 477 (Tallahassee, Florida), p. 1141.

along with instructions on how much money should be collected for service charges per box of fruit handled.

At a meeting of the State Agricultural Marketing Board held in Tallahassee on October 24, 1939, business was confined to the 1939 act regarding citrus houses. It was decided that, in addition to the three houses prescribed, seven additional ones would be put into operation. These were to be located at Wauchula, Plant City, Dade City, Ocala, Fort Pierce, Eustis, and Cocoa.⁹ Just prior to their opening, a court injunction was issued to halt all plans to operate citrus-washing houses, but only after eight houses had been constructed and prepared for operation.¹⁰ This injunction was issued by Judge J. B. Johnson, in the Circuit Court of Leon County, November 24, 1939.¹¹ The issues involved in the court action stopping operation of citrus-washing houses were not necessarily connected with washing citrus, but instead they centered around the constitutionality of the \$50,000 appropriated from the General Inspection Fund. An oil company, paying fees into the General

⁹Florida, State Agricultural Marketing Board, Minutes of Meeting, October 24, 1939 (Tallahassee, Florida), Files of the State Marketing Bureau.

¹⁰Florida, State Agricultural Marketing Board, Annual Report, 1940 (Jacksonville, Florida), p. 3.

¹¹Leon County, Florida, Circuit Court case, Colonial Oil Company vs. Nathan Mayo, et al., Files of the Attorney General's Office.

Inspection Fund to cover the inspection costs of petroleum products, objected to having its tax monies spent in this manner. Four of these facilities were never utilized. One was leased for one year. Two were operated for a few years for the sale of miscellaneous products and one was diverted to a vegetable market which is still in operation.

By the end of the sixth season of operation in 1940, the State Agricultural Marketing Board had 30 State Farmers' Markets. Twenty markets were in operation during that season and recorded over \$7,000,000 in sales. Eight markets were under construction and two were completed but had not been placed in operation.¹²

Director of State Markets

In 1941, with the Agricultural Marketing Board's operation of farmers' markets expanded, and continued growth expected, the State Legislature separated the Agricultural Marketing Board from the State Marketing Bureau by completely rewriting the laws through amendments.¹³ In essence, the laws of 1929 and 1933 pertaining to the Agricultural

¹²Florida, State Agricultural Marketing Board, Annual Report, 1940 (Jacksonville, Florida), pp. 1 and 9.

¹³Florida, Laws of Florida, 1941 General Laws, Volume 1, Chapter 20345 (Tallahassee, Florida), p. 543.

Marketing Board were kept intact, with the exception of deleting all references to duties of the State Marketing Bureau and the mixing of feeds. Additional provisions were included in the revised Agricultural Marketing Board law to permit the operations of bonded warehouses and the issuance of negotiable warehouse receipts. At the same time, authority was given for the employment of a Director of State Markets to establish a central office for the operation of all markets (Appendix page 412).

The 1941 Legislature passed another law which required the Agricultural Marketing Board to establish and maintain a market for the selling and processing of livestock. It provided \$25,000 for that purpose.¹⁴ This law heralded the increasing importance of livestock in Florida's economy and the benefits of the State Livestock Auction Markets in aiding and assisting that development. It also described the desirability of further development through additional facilities for selling and processing livestock (Appendix page 414). The Annual Report for the season ending prior to the passage of this act showed that six state livestock markets were in operation; two were under construction; and one had been completed but never used.

¹⁴Ibid., Chapter 20987, p. 2691.

At the 1943 session of the State Legislature, a law was passed to create a Board of Directors for the Ocala State Farmers' Market and to have the active management and operation of this market turned over to the Board of Directors created (Appendix page 416).¹⁵

By 1946, it had become evident that some of the market facilities owned by the Agricultural Marketing Board, but not in use, should be sold or removed from the records. In 1946, the Annual Report indicated that there were 26 markets in operation. Facilities not in use were listed for Branford, Cocoa, Goodno, LaBelle, Tallahassee, Williston, and the Bushnell Livestock Market. Eustis was not mentioned; but it, too, had an unused state market. It was with this background that the 1947 Legislature passed a law to permit the Agricultural Marketing Board to sell, exchange, convey, or otherwise dispose of any land, real property, or personal property it owned or held, but did not need for markets (Appendix page 416).¹⁶ Since the passage of the 1947 law, the number of market sites owned by the Agricultural

¹⁵Florida, Laws of Florida, 1943 General Laws, Volume 1, Chapter 22055 (Tallahassee, Florida), p. 811.

¹⁶Florida, Laws of Florida, 1947 General Laws, Volume 1, Chapter 23803 (Tallahassee, Florida), p. 369.

Marketing Board has declined steadily from 36 in 1946 to 18 in 1961.¹⁷

Type, Date, and Location
of Markets Constructed

In the 26 years of State Farmers' Market operations, 40 state markets have been constructed. Of these, 16 were used primarily for vegetables, 9 were used primarily for livestock, 2 were combinations of vegetables and livestock, and 13 were for other types of products. Figure 3 shows the geographical location of each of the markets and the principal type of products handled. Table 33 gives the location of each market, year of construction, type of market, period of operation, and whether the market operated at a profit or loss during the years it operated.

No records are available to indicate sales at six markets erected. Markets at Tallahassee, Branford, LaBelle, and Williston were all leased for one year, but there is no record available on sales or operations. The state facilities built at Eustis and Goodno markets were never operated as markets. The Cocoa market had an operating period of two years and closed.

¹⁷Records in the office of the Director of State Markets.

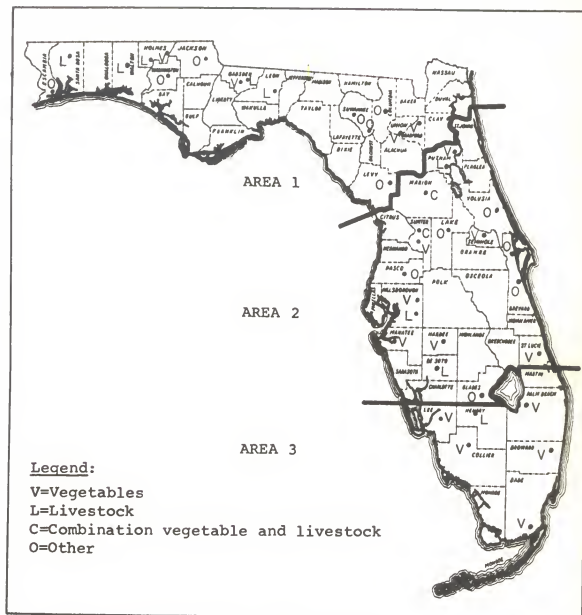


Figure 3.--Florida: Location of State Farmers' Markets built by Agricultural Marketing Board and type of products handled.

TABLE 33.--Year of construction and location of all State Farmers' Markets, type of products handled, and whether market showed profit or loss

Year Built	Location	Type of Market								
		Vegetable	Livestock	Other	1935	1936	1937	1938	1939	1940
1935	Sanford	X			+	+	-	+	+	+
1936	Live Oak			X			0	+	+	0
1937	Chipley			X			0	-	-	+
1937	Ocala	X	X	X			1	+	+	+
1937	Palmetto	X						1	1	+
1937	Tallahassee		X						0	
1937	Wauchula	X					+	+	+	+
1938	Bonifay		X					0	0	0
1938	Bushnell	X	X					-	-	-
1938	Palatka	X						+	+	-
1938	Plant City	X							+	+
1938	Starke	X						-	1	-
1939	Arcadia		X						0	0
1939	Branford			X					0	
1939	Dade City			X						
1939	Florida City	X								+
1939	Fort Pierce	X								
1939	Holly Hill			X					-	+
1939	Jay		X							
1939	LaBelle		X							0
1939	Lake City			X						
1939	Marianna			X					+	-
1939	Pahokee	X								
1939	Palatka		X							
1939	Pompano	X								+
1939	Williston			X						0
1940	Cocoa			X						
1940	DeFuniak Springs		X							

TABLE 33.--Continued

Year Built	Location	Type of Market								
		Vegetable	Livestock	Other	1935	1936	1937	1938	1939	1940
1940	Eustis			X						
1940	Plant City		X							
1940	Titusville			X						0
1941	Quincy		X							
1942	Bushnell	X								
1944	Fort Myers	X								
1945	Goodno			X						
1951	Immokalee	X								
1952	Brooker	X								
1954	Gadsden County	X								
1957	Bonifay	X								

X Represents type of market.

0 Represents market operated, but no operating statement available.

+ Represents operating statement showing a break-even point or a profit.

- Represents operating statement showing a loss.

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 33.--ExtensionOperating Results for Season Ending in June

1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
0	-	-	+	0	-	+	-	-											
			+	-	-	+	+	+	+										
+	-			-	-														
					-	-	-	-	-	-	+	+	+	+	+	+	-	+	+
											-	+	-	+	+	+	+	+	+
											+	-	+	-	-	-	-	-	-
														-	-	-	-	-	-
																-	-	-	-

The Bushnell livestock and produce market operated for six years and closed; but, two years before it closed, the Bushnell vegetable market was opened. The latter market operated for four years out of five and was closed. The Plant City livestock market operated for only six years. One of those years it was under lease. It closed in 1947. The Quincy livestock market was operated for seven years, and closed in 1950.

Other markets have operated for longer periods and closed. The Palmetto market, for instance, operated for 22 years before it was closed and sold in 1959. Starke, on the other hand, has operated 23 years with very little volume. Its operation continues even though it seldom pays operating costs.

State Farmers' Markets by Areas

On a sectional basis, State Farmers' Markets have been concentrated most heavily in Area 2. Area 1 is second in number of state markets constructed and Area 3 is third. Sixteen state markets have been erected in Area 1. A few of these markets were leased out when built and were never operated by the state. Of those constructed, four were for vegetables, five for livestock, and seven for other kinds of products. There are seven state markets currently operating

in Area 1. Four of those -- Bonifay, Brooker, Gadsden County, and Starke -- are for vegetables. Three livestock markets are located at Bonifay, DeFuniak Springs, and Jay.

Area 2 has had 18 state markets erected. Two of these markets never operated. Seven vegetable markets were constructed, three livestock, two combination produce and livestock, and six other kinds. Six markets are currently operating in Area 2. Of those, five are vegetable markets located at Fort Pierce, Palatka, Plant City, Sanford, and Wauchula, and one is a livestock market, at Arcadia.

Six state markets have been established in Area 3. One, a livestock market at LaBelle, was leased for one year and then closed. The five other markets were for vegetables. At the present time, all of these markets are in operation. They are located at Florida City, Fort Myers, Immokalee, Pahokee, and Pompano.

Fixed Assets in Markets and Equipment

Appraised value or potential sales value of the markets, property, and equipment is not available. Investments in the markets have come from several sources, and even the total investment value is unknown. Most of the real estate

for markets was donated by local communities, but some was bought with state funds. Much of the construction labor during the 1930's was furnished by the Federal Government's "make-work" relief programs. Among these were the Federal Emergency Relief Administration, Works Progress Administration, and the National Youth Administration. Commercial contracting companies have done the construction work in recent years.

Assigned book values of fixed assets have been reported with each annual report. These were based mostly on actual cash cost to the state. However, from these, it is possible to follow the increase in value of Agricultural Marketing Board properties in state markets and equipment. Land values listed with the fixed assets are only a fraction of cash values on today's real estate market.

As mentioned previously, the first state market was at Sanford. In 1935, it had fixed assets of \$58,000. In 1960, fixed assets of all state market properties were valued at \$4,736,000 (Table 34). Average fixed assets, per market, declined from \$58,000 in 1935, to \$37,000 in 1942. However, by 1960, they had increased to \$279,000 per market.

TABLE 34.--Number of State Farmers' Markets operated, total annual value of fixed assets, and average value per market, 1935-60

Season Ending June 30	Number of Markets	Value of Fixed Assets ^a	
		Total	Average per Market
		(\$1,000)	(\$1,000)
1935	1	58	58
1936	1	58	58
1937	6	354	59
1938	11	634	58
1939	25	1,028	41
1940	30	1,271	42
1941	28	1,109	40
1942	32	1,196	37
1943	32	1,205	38
1944	32	1,213	38
1945	30	1,275	43
1946	29	1,203	41
1947	29	1,591	55
1948	26	1,629	63
1949	25	1,717	69
1950	21	1,678	80
1951	20	1,920	96
1952	22	2,178	99
1953	20	2,302	115
1954	21	3,154	150
1955	19	3,420	180
1956	19	3,619	190
1957	19	3,894	205
1958	19	4,549	239
1959	18	4,569	254
1960	17	4,736	279

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aBased on book value with real estate much below actual.

Sales by Product Classification

In 25 years, State Farmers' Market sales increased to 100 times the amount recorded for the first year of operation, or from \$519,000 in 1935, to \$52,141,000 in 1960 (Table 35). While sales have increased, the kinds of products have tended to vary. Produce markets were the only kind operated the first three years. However, beginning in 1938, there were other kinds of markets; and produce accounted for only 47 per cent of sales for that year. Produce quickly returned to the dominant position in sales, and for the last 22 years it has made up 74 to 95 per cent of sales.

Produce sales, as distinguished from Florida-grown vegetable sales, include fruits, flowers, and items grown out-of-state. When Florida-grown vegetable sales are removed from produce sales, the difference becomes fruit, flowers, and out-of-state item sales. This group of items, other than Florida-grown vegetables, has accounted for 2 to 9 per cent of state market sales (see Tables 1 and 35). Florida-produced vegetable sales have risen from \$715,000 in 1938 (the first year that items were classified) to \$46,358,000 in 1960.

The first livestock markets were operated in 1937-38, and value of sales amounted to \$420,000. This amount

TABLE 35.--Amount and percentage of sales recorded at State Farmers' Markets, by type of products, 1935-60

Season Ending June 30	Amount of Sales		
	Produce	Livestock	Other Kinds of Products
	(\$1,000)	(\$1,000)	(\$1,000)
1935	519	. .	. .
1936	750	. .	. .
1937	800	. .	. .
1938	802	420	482
1939	3,426	732	461
1940	5,923	1,019	282
1941	9,035	1,639	495
1942	10,040	2,885	366
1943	16,382	3,227	532
1944	18,238	3,962	1,118
1945	20,104	3,625	887
1946	26,451	4,203	557
1947	27,724	5,560	612
1948	23,998	3,714	1,216
1949	33,422	3,902	1,030
1950	32,190	2,409	811
1951	36,908	3,195	4,826
1952	42,061	3,906	943
1953	37,373	3,101	644
1954	36,517	2,677	123
1955	44,745	2,141	. .
1956	46,113	2,233	. .
1957	45,617	2,593	. .
1958	37,304	3,001	. .
1959	42,944	3,565	. .
1960	49,469	2,671	. .

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLess than 1 per cent.

TABLE 35.--Extension

Per Cent of Total Sales			
Total	Produce	Livestock	Other Kinds of Products
(\$1,000)			
519	100	0	0
750	100	0	0
800	100	0	0
1,704	47	25	28
4,619	74	16	10
7,224	82	14	4
11,169	81	15	4
13,291	75	22	3
20,141	81	16	3
23,316	78	17	5
24,616	82	15	3
31,211	85	13	2
33,896	82	16	2
28,928	83	13	4
38,254	87	10	3
35,410	91	7	2
44,929	82	7	11
46,910	90	8	2
41,118	91	8	1
39,317	93	7	2
46,886	95	5	0
48,346	95	5	0
48,210	95	5	0
40,305	93	7	0
46,509	92	8	0
52,140	95	5	0

increased to \$5,560,000 for the season ending in 1947, but sales in 1959-60 were only \$2,671,000. When livestock sales were first reported, they amounted to 25 per cent of state market sales. Since then, they have declined to around 5 per cent.

Markets for products, other than produce or livestock, were also opened in the 1937-38 season. These items included dairy products, poultry, eggs, tobacco, field crops, home crafts, canned goods, feeds, fertilizer, and seeds. None of these items ever reached sales values large enough to justify singling them out individually. Tobacco did exceed \$4,000,000 in sales for one season, 1950-51. The group of products handled at state markets, excluding produce and livestock, is referred to as "other kinds of products." Other kinds of products were first reported in 1938 at a sales value of \$482,000, or 28 per cent of state market sales. During the season ending in 1951, sales in this category reached a maximum of \$4,826,000, but at that time were only 11 per cent of the total. Sales of other kinds of products declined after 1951, and in 1954 were less than 1 per cent of state market sales. None has been reported since.

Amount and Sources of Income

The annual gross income of State Farmers' Markets increased steadily from \$3,000 in 1935 to \$353,000 in 1956. It has declined since that time to \$320,000 in 1960 (Table 36). All income is required by law to be deposited with the State Treasurer to the credit of the General Inspection Fund, Special State Farmers' Market Account, and may be used for payment of the expenses of operation, maintenance, and equipment.

Income for state markets operation is derived from several sources. None has consistently provided the greatest proportion. However, the source of income with the smallest variation has been platform rentals. During the early years of operations, platform rentals contributed as much as 80 per cent of all income. More recently, they have contributed less than 20 per cent.

Produce package fees were the dominant source of income in 1960. They amounted to \$104,000, or 33 per cent of the total. Produce package fees were not used as a source of income until 1941, when less than \$500 were reported.

Truck registrations have continued as a source of income since state markets began operating. They started in 1935 at nearly \$1,000 and were 33 per cent of the total

TABLE 36.—Amount and percentage of total income of State Farmers' Markets, by source, 1935-60

Season Ending June 30	Total	Produce Package Fees	Truck Registrations	Warehouse Rental	Produce Commission	Livestock Commission	Produce Auction	Platform Rental	Office Rental	Packhouse Rental	Livestock Yard Rental	Other					
	(\$1,000)	(\$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent	(Per \$1,000) Cent					
1935	3	..	0	1	33	b	0	b	0	2	67	b	0	b	0	..	0
1936	5	..	0	1	20	a	c	b	0	b	0	a	c	b	0	..	0
1937	7	..	0	b	0	b	0	b	0	2	29	3	42	b	0	a	c
1938	21	..	0	2	10	a	c	3	14	1	5	4	19	3	14	a	c
1939	39	..	0	2	5	1	2	21	54	3	9	4	10	5	14	1	2
1940	63	..	0	2	3	2	3	25	40	5	8	7	11	18	29	2	3
1941	60	a	c	4	7	3	5	4	7	9	15	12	20	1	2	3	5
1942	86	2	2	4	5	2	2	10	12	4	4	11	13	12	14	b	0
1943	84	17	20	3	4	5	6	3	4	2	1	10	12	17	20	1	1
1944	113	21	19	3	3	4	4	6	5	a	c	13	11	22	19	2	1
1945	110	30	27	3	3	6	5	1	1	1	1	10	9	24	22	3	3
1946	139	30	22	3	2	6	4	1	1	b	0	35	25	27	19	4	3
1947	146	18	12	5	3	7	5	3	2	1	1	36	25	30	21	6	4
1948	161	18	11	4	2	9	6	1	1	b	0	50	31	30	19	6	4
1949	203	80	40	6	3	8	4	1	c	b	0	17	9	35	17	7	3
1950	248	140	56	7	3	9	4	b	0	b	0	b	0	37	15	8	3
1951	225	103	46	7	3	11	5	b	0	b	0	b	0	43	19	10	4
1952	268	131	49	8	3	11	4	b	0	b	0	54	20	6	3	12	4
1953	269	112	42	8	3	3	1	b	0	b	0	67	25	13	5	19	7
1954	308	123	40	9	3	3	1	b	0	b	0	69	22	13	4	30	10
1955	347	155	45	10	3	2	1	b	0	b	0	75	21	16	5	39	11
1956	353	155	44	11	3	4	1	b	0	b	0	75	21	22	6	44	12
1957	348	151	43	10	3	3	1	b	0	b	0	63	18	21	6	62	18
1958	303	101	33	7	2	3	1	b	0	b	0	56	19	27	9	73	24
1959	337	127	38	8	2	3	1	b	0	b	0	54	16	30	9	76	22
1960	320	104	33	8	3	3	1	b	0	b	0	55	17	30	9	80	25

SOURCES: Calculated from Florida, State Agricultural Marketing Board, ANNUAL REPORTS.

a Less than \$500. b Not reported. c Less than one-half of 1 per cent.

income for that year. In 1960, they were \$8,000 and amounted to 3 per cent of income.

Warehouse rentals have contributed small amounts to income in all but two years of operation. They have never exceeded 6 per cent of income.

Produce and livestock commissions were collected between 1938 and 1948 as a means of securing income. However, in recent years, they have not been referred to in annual reports. Produce commissions were at a high of 54 per cent of income in 1939. Livestock commissions reached a high of 9 per cent of income in 1939.

Produce auctions fees at one time provided a substantial proportion of income. They were first reported in 1937 at 29 per cent of income. In 1948, they accounted for 31 per cent; but in 1949, the amount was only 9 per cent of income. They were not reported again until 1957, when watermelon auctions contributed small amounts to income.

Office and packing house rentals are the only sources of income that have not declined in recent years. Office rentals were first collected in 1938 and increased steadily to 9 per cent of income in 1960. Packing house rentals began in 1936 and increased to 25 per cent of income in 1960. Livestock yard rentals have contributed from 1 to 4 per cent of income since 1942.

Miscellaneous sources of income, such as filling station and restaurant rentals, scale fees, telephone and telegraph commissions, etc., have been grouped in one classification called "other." It has been as high as \$51,000 in 1954, when it made up 17 per cent of all income. In 1942, it amounted to 42 per cent of all income; but, more recently, only 9 or 10 per cent of income has been coming from this classification.

Operating Expenses

State Farmers' Markets operating expenses have had an increasing trend from the first year markets were started. In 1935, total operating expenses were \$2,345. In 1956, they were at a peak of \$307,062. By 1960, they had declined to \$266,971 (Table 37).

Through the years, salaries and wages have been by far the most important category of operating expenses. They have ranged from one-half to three-fourths, and have averaged 64 per cent of total operating expenses.

Operating expenses, other than for personnel, have averaged 36 per cent of the total. They have ranged from 47 per cent in 1950 to 26 per cent in 1960. Among these miscellaneous "other operating expenses," are insurance,

TABLE 37.--State Farmers' Markets' operating expenses, 1935-60

Season Ending June 30	Total Operating Expense	Salaries and Wages		Other Operating Expense	
	(Dollars)	(Dollars)	(Per cent)	(Dollars)	(Per cent)
1935	2,345	1,568	67	777	33
1936	4,634	3,079	66	1,555	34
1937	7,156	3,853	54	3,303	46
1938	21,546	14,330	67	7,216	33
1939	33,939	22,858	67	11,081	33
1940	56,588	34,250	61	22,338	39
1941	53,264	36,123	68	17,141	32
1942	85,049	48,443	57	36,606	43
1943	80,619	49,435	61	31,184	39
1944	89,586	58,761	66	30,825	34
1945	90,366	60,141	67	30,219	33
1946	108,350	68,135	63	40,215	37
1947	118,232	79,527	67	38,705	33
1948	125,822	82,368	65	43,454	35
1949	138,645	88,830	64	49,815	36
1950	182,919	96,120	53	86,798	47
1951	218,756	142,226	65	76,530	35
1952	251,141	172,254	69	78,887	31
1953	276,342	164,457	60	111,885	40
1954	282,124	172,548	61	109,576	39
1955	306,970	190,597	62	116,391	38
1956	307,062	193,963	63	113,099	37
1957	293,273	193,357	66	99,916	34
1958	297,737	199,191	67	98,546	33
1959	278,739	202,572	73	76,167	27
1960	266,971	196,310	74	70,661	26
Average	. .	. .	64	. .	36

Source: Florida, State Agricultural Marketing Board, Annual Reports.

utilities, maintenance, travel, federal-state inspection, and supplies. There are others, but the important ones are listed. Insurance and utilities are generally the largest, in that order. Maintenance and federal-state inspection varied greatly from year to year and were at times larger than either insurance or utilities. In 1950, both maintenance and federal-state inspection exceeded all other expense categories, with the exception of personnel expenses.

State market expenses include no taxes, depreciation, or interest on investment. No charges for depreciation or interest have ever been made because of the originating state law which stated " . . . make such charges for service as will cover the cost of operation,"¹⁸ Depreciation and interest on investment have not been deemed cost of operation.

Profit and Loss

Key items of annual operating statements appear in Table 38. This table shows that, in 1935, profit was 24 per cent of income. This was exceeded only in 1949 and 1950 when 32 and 26 per cent of income, respectively, were profit.

¹⁸Florida, Laws of Florida, 1941. General Laws, Volume 1, Chapter 20345 (Tallahassee, Florida), p. 543.

TABLE 38.--Income, operating expenses, and profit or loss
for State Farmers' Markets, 1935-60

Season Ending June 30	Income	Operating Expenses		Profit or Loss ^a	
	(Dollars)	(Dollars)	(Per cent of income)	(Dollars)	(Per cent of income)
1935	3,091	2,345	76	746	24
1936	4,962	4,634	93	328	7
1937	7,210	7,156	99	54	1
1938	21,468	21,546	100.4	(78)	(.4)
1939	38,724	33,939	88	4,785	12
1940	63,405	56,588	89	6,817	11
1941	60,415	53,264	88	7,151	12
1942	85,595	85,049	99	546	1
1943	83,907	80,619	96	3,288	4
1944	113,008	89,586	79	23,422	21
1945	110,249	90,366	82	19,883	18
1946	139,056	108,350	78	30,706	22
1947	146,167	118,232	81	27,935	19
1948	160,744	125,822	78	34,922	22
1949	202,707	138,645	68	64,062	32
1950	247,625	182,919	74	64,706	26
1951	224,531	218,756	98	5,775	2
1952	267,789	251,141	94	16,648	6
1953	268,512	276,342	103	(7,830)	(3)
1954	307,713	282,124	92	25,589	8
1955	347,307	306,970	88	40,337	12
1956	352,562	307,062	87	45,500	13
1957	348,144	293,273	84	54,871	16
1958	303,178	279,737	92	23,441	8
1959	336,523	278,739	83	57,784	17
1960	320,050	266,971	83	53,079	17
Total	. .	. .	. .	604,467	. .
Average	. .	. .	. .	23,249	13

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLoss shown in parentheses.

Annual profit from operations ranged from a low of \$54 in 1937 to a high of \$64,706 in 1950. Losses from operations were reported in only 2 of the 26 years. These were in 1938, when operating expenses exceeded income by \$78, and 1953, when operating expenses exceeded income by \$7,830. These losses were .4 and 3 per cent of income respectively.

Total profits from state market operations for the 26-year period amounted to \$604,467, or an average of \$23,249 per year. Average annual profit has been 13 per cent of income.

Seasons of Profit or Loss for Markets

The number of individual market-seasons of operation completed by markets under the State Agricultural Marketing Board can be determined from Table 33. (The term "market-season" as used refers to one market operating one season beginning in July and ending in June.) Using market-season as a measure, 498 have been completed. Of this number, 21 were operated on a leased basis, and no operating statements were submitted. The other 477 market-seasons were recorded by operating statements in the annual reports.

The terms profit and loss as used here are not the same as profit or loss usually shown in operating statements.

No interest on investment, depreciation, or cost of state supervision is shown in the operating statements of any market as expenses. Therefore, the gain or loss refers merely to whether income to the markets was in excess of or less than the operating expenses other than interest, depreciation, and cost of state supervision.

Operating statements of the 477 market-seasons of operation show that, during 60 per cent of them, the markets involved had income in excess of operating expenses. During 40 per cent of the seasons, the markets involved operated at a loss. Of 266 market-seasons of vegetable market operations, 65 per cent showed a profit, and 35 per cent, a loss. Livestock market-seasons numbered 102 with 69 per cent showing a profit, and 31 per cent showing a loss. Combination (livestock-produce) market-seasons operated were 17, with 65 per cent showing a profit and 35 per cent showing a loss.

Other kinds of markets, which included tobacco, curb, handicraft, dairy, and poultry, had 92 market-seasons of operation, with only 35 per cent paying operating expenses. Sixty-five per cent of the market seasons were operated at a loss.

In 1960, there were only 4 livestock and 14 vegetable markets operating. All livestock markets paid operating expenses. Four vegetable markets operated at a loss.

Income, Operating Expenses, and Profit
in Relation to Sales

Income as a percentage of sales has remained below 1 per cent for each of the 26 years of operation, with the exception of 1938, when it was 1.26 per cent (Table 39). Income as a percentage of sales has ranged from less than half of 1 per cent to 1.26 per cent. It has averaged about two-thirds of 1 per cent of sales. Another way of expressing it is to say that the cost of selling agricultural products at state markets is about six and one-half mills per dollar of sales.

With the exception of three years, operating expenses, as a percentage of sales, have remained fractionally below those for income. There were two years when operating expenses exceeded income and one year when the profit was so small that operating expense and income as a percentage of sales were about the same.

Annual operating expense, as a percentage of sales through the operational period, averaged about six-tenths of 1 per cent. This means that operating costs were about six mills per dollar of sales.

Profit or loss as a percentage of sales ranged from a small loss in 1953 to about two-tenths of 1 per cent in

TABLE 39.--State Farmers' Markets' sales, income, operating expenses, and profit or loss stated in dollars and as a percentage of sales, 1935-60

Season Ending June 30	Sales	Income	
	(Dollars)	(Dollars)	(Per cent of sales)
1935	518,625	3,091	.60
1936	750,000	4,962	.66
1937	800,000	7,210	.90
1938	1,703,673	21,468	1.26
1939	4,618,858	38,724	.84
1940	7,224,146	63,405	.88
1941	11,169,456	60,415	.54
1942	13,290,988	85,595	.64
1943	20,141,104	83,907	.42
1944	23,316,098	113,008	.48
1945	24,616,129	110,249	.44
1946	31,211,386	139,056	.44
1947	33,896,219	146,167	.43
1948	28,928,327	160,744	.56
1949	38,353,676	202,707	.53
1950	35,409,752	247,625	.70
1951	44,929,095	224,531	.50
1952	46,910,032	267,789	.57
1953	41,117,555	268,512	.65
1954	39,316,780	307,713	.78
1955	46,886,248	347,307	.74
1956	48,346,269	352,562	.73
1957	48,209,744	348,144	.72
1958	40,304,859	303,178	.75
1959	46,509,117	336,523	.72
1960	52,140,546	320,050	.61
Average	. .	. .	.65

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLess than one-half of one-hundredth.

TABLE 39.--Extension

Operating Expenses		Profit or Loss ^b	
(Dollars)	(Per cent of sales)	(Dollars)	(Per cent of sales)
2,345	.45	746	.15
4,634	.62	328	.04
7,156	.89	54	.01
21,546	1.26	(78)	(a)
33,939	.74	4,785	.10
56,588	.79	6,817	.09
53,264	.48	7,151	.06
85,049	.64	546	a
80,619	.40	3,288	.02
89,586	.39	23,422	.09
90,366	.36	19,883	.08
108,350	.35	30,706	.09
118,232	.35	30,935	.08
125,822	.44	34,922	.12
138,645	.36	64,062	.17
182,919	.52	64,706	.18
218,756	.49	5,775	.01
251,141	.53	16,648	.04
276,342	.67	(7,830)	(.02)
282,124	.72	25,589	.06
306,970	.65	40,337	.09
307,062	.64	45,500	.09
293,273	.61	54,871	.11
279,737	.69	23,441	.06
278,739	.60	57,784	.12
266,971	.51	53,079	.10
. .	.58	23,249	.07

^bLoss shown in parentheses.

1950. Three years, 1937, 1942, and 1951, were about at a break-even level.

Average profit for all operating years was less than one-tenth of 1 per cent of sales. This amounts to profit from market operations of less than one mill per dollar of sales.

Returns on Investments in Fixed Assets

Profits from state market operations compared to reported fixed assets show that these profits ranged from about a break-even point to 3.8 per cent of the value of fixed assets (Table 40). Losses were reported twice and both times represented a small percentage of fixed assets. The highest profit, 3.8 per cent of fixed assets, was reported in 1950.

Average profit for the operating period was 1.1 per cent of the value of fixed assets. Or, expressed in mills, average gains were 11 mills per dollar of fixed assets.

TABLE 40.--Operating profit and fixed assets for State
Farmers' Markets, 1935-60

Season Ending June 30	Fixed Assets	Profit or Loss ^b	
	(Dollars)	(Dollars)	(Per cent of Fixed assets)
1935	57,614	746	1.3
1936	57,750	328	.6
1937	354,129	54	a
1938	634,384	(78)	(a)
1939	1,028,368	4,785	.5
1940	1,271,264	6,817	.5
1941	1,108,576	7,151	.6
1942	1,195,758	546	a
1943	1,204,756	3,288	.3
1944	1,213,183	23,422	1.9
1945	1,274,731	19,883	1.6
1946	1,202,895	30,706	2.6
1947	1,590,753	27,935	1.8
1948	1,629,238	34,922	2.1
1949	1,716,900	64,062	3.7
1950	1,687,070	64,706	3.8
1951	1,920,309	5,775	.3
1952	2,177,632	16,648	.8
1953	2,301,545	(7,830)	(.3)
1954	3,153,614	25,589	.8
1955	3,419,572	40,337	1.2
1956	3,619,069	45,500	1.3
1957	3,893,639	54,871	1.4
1958	4,549,493	23,441	.5
1959	4,568,868	57,784	1.3
1960	4,736,357	53,079	1.1
Average	. .	23,249	1.1

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLess than one-half of one hundredth.

^bLoss shown in parentheses.

Changes in Operation for State Markets

All available sources of information indicate that it was the intent of legislators that state markets provide a low-cost assembly area where buyers and sellers of agricultural products could meet to transact their business. However, the law that created the state markets required payment from growers and handlers for services rendered them or space they used, and stated that operating costs must be self-liquidating. Services were not defined, charges for such services were not established, nor were operating costs delineated.

Operational Support and Utilization of Services

During the early period of state market operations, revenue was collected entirely from non-farm users. Platform rentals from dealers who leased stalls at the market comprised 67 to 80 per cent of revenue the first two years (Table 36). Truck registrations for market privileges made up the remaining revenue. These sources of revenue were still being used in 1960, but they were much less important, proportionately. In 1960, platform rentals accounted for 17 per cent of revenue while truck registration comprised 3 per cent. Between 1937 and 1949, revenue was derived from

commissions and auction charges on grower sales. Commission fees and auction charges were important income sources when auctions were the principal method of trade. Commissions from produce sales amounted to 54 per cent of revenue in 1939, and livestock commissions accounted for 9 per cent. Grower objections to the system of sales commissions, on the grounds that they were unfair, brought about a gradual shift to a flat fee per package for both auction and non-auction selling.

Transition from the commission and auction charge system to the produce package fee system, as an income source, can be followed in Table 36. Auction charges and commissions on sales were both reported about the same time and were major sources of income. After World War II, they decreased as produce package fees increased. Produce auction income was 29 per cent of total income in 1937, but became insignificant after 1949. Produce package fees were first reported in 1941. They had become a major source of income by 1949, and have since ranged between 33 and 56 per cent of income. Efforts were being made in 1960 by some markets to remove all charges to growers.

Packing house rentals and office rentals have been important sources of marketing income in recent years, so

that growers did not bear the total cost of market operation.

Trading Practices

Methods of trade between growers and buyers have varied throughout the years. In early trading, the market managers took possession of some merchandise and paid growers the proceeds after deducting a small percentage for market fees or commission. This method is occasionally practiced today. Private sales have long been an established method of trade. Under private sales, several systems have been practiced. One system involved private dealers buying directly from growers at a price agreed upon when produce was delivered by the grower. Another system of private sales was for private dealers to accept goods set-off on their dock and pay growers after sales had been completed. This was essentially commission selling, but has been commonly referred to as a "set-off deal." Until recent years, auction selling was the method of trade preferred by growers at most markets. However, the most recent trend has been for growers to have an informal verbal arrangement with a selling broker at a market to represent them (the growers) in making the best possible sale.

The major problem with all methods of trade at state markets has been that of determining a method which would

permit all available buyers to appraise all available merchandise, and enable the growers to accept the best offer. Physical factors of time, space, quantity, schedules, and product handling involve problems with which it is difficult to cope. Growers find it impossible to be production specialists and marketing specialists. The various methods of trade used reflect the grower's attempts to find someone to help him with marketing problems. It has been difficult for farmers to seek out and trade profitably with farm-product distributors at the farmers' convenience. In order that products can be intelligently and properly placed into the distribution system, growers have made an effort to maintain market contacts by turning to brokers or selling agents.

Regardless of the method of trade practiced, state markets have played an important part in the assembly and marketing of many Florida agricultural products.

CHAPTER V

OPERATIONS OF FARMERS' MARKETS SELLING VEGETABLES

Sixteen vegetable markets have been built and operated by the State Agricultural Marketing Board (Table 41). At times, most of these markets have handled products other than vegetables. Among the other products handled have been citrus, subtropical fruits, nuts, field crops, and products produced out of the state. These non-vegetable items have never been large in relation to total business. Likewise, some vegetables have been sold at state markets which were not specifically designated as vegetable markets.

Several of the non-vegetable markets will be discussed at this point because vegetables were either important to the market or to the area served.

The Williston Farmers' Market was built at the mandate of the State Legislature of 1939 as a citrus-washing house (see Laws of Florida, 1939, Appendix page 410). Before this market was opened, a court injunction was issued (and upheld) to prevent the operation of all state citrus-

TABLE 41.--State Farmers' Markets for vegetables arranged in order of first sales, showing the location by areas in Florida

Season of Opening	Area 1	Area 2	Area 3
1934-35		Sanford	
1936-37		Wauchula	
1937-38		Palmetto ^a	
1937-38		Palatka	
1937-38	Starke		
1938-39		Plant City	
1939-40			Pompano
1939-40			Florida City
1940-41		Fort Pierce	
1941-42			Pahokee
1941-42		Bushnell ^a	
1945-46			Fort Myers
1951-52			Immokalee
1951-52	Brooker		
1954-55	Gadsden County		
1957-58	Bonifay		

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aCeased operating before 1960.

washing houses (see page 109). In an effort to salvage the investment in the Williston market, it was leased in the 1939-40 season as a vegetable market. There was no indication that this market was ever used again. The Williston market, in the 1939-40 season, had fixed assets of \$747. Vegetable sales of \$10,980 were reported. This market was operated by the lessee at no expense to the state.

There were some sales of vegetables at the Ocala Farmers' Market for a few years. It was established as a combination market for all farm products. It opened for the 1936-37 season and continued operations through the 1946-47 season. No vegetable sales records were available; but, from the information that was obtained, it is obvious that the Ocala Farmers' Market was predominantly a livestock market.

In 1943, the State Legislature passed a law which removed the active management of the Ocala State Farmers' Market from the state's central market management authority and placed it in the hands of a local board of directors (see Laws of Florida, Appendix page 416).

Two State Farmers' Markets, which were intended for livestock (Bonifay and Bushnell), were opened for the 1937-38 season. Each of these markets handled vegetables.

However, a separate vegetable market was established at each of these locations at a later date. The Bushnell vegetable market was opened for the 1941-42 season, and the Bonifay vegetable market was opened for the 1957-58 season. The Bonifay and Bushnell vegetable markets' operating results are included in the analysis which follows.

History of Vegetable Markets

All of the vegetable markets, with the exception of Bushnell and Palmetto, were still in operation in 1961. Both of the closed vegetable markets were in Area 2 (Figure 4). A complete annual history of each state vegetable market is presented.

Area 1

Area 1 has had four vegetable markets. One market has operated continuously since the 1937-38 season. The other three markets have been in operation from four to ten years.

Bonifay.--The Bonifay State Farmers' Market for vegetables has operated since the 1957-58 season. Prior to this, small quantities of vegetables were sold at the Bonifay State Farmers' Market for livestock. This market operates a split

season during the fall and spring. It is open about 12 weeks per year.

The Bonifay state vegetable market sales have ranged from \$11,304 to \$27,798 (Table 42). Income has failed to pay expenses by \$2,000 or more each year of operation. Personnel expenses have remained at \$2,400. Fixed assets increased from \$48,943 in 1958 to \$56,109 in 1960.

Thirteen vegetable items have been handled regularly at the Bonifay market, but a rather limited amount of each item has been available (Table 43). Watermelons and southern peas were the largest-volume vegetables. About 1,600 field boxes (60 pounds) of tomatoes were sold in 1958; but, since then, the volume has decreased greatly. Sweet potatoes were unreported in 1958, but more than 1,100 bushels were sold in 1959. Their volume was only one-third of this in 1960.

Brooker.--The Brooker state vegetable market has operated since the 1951-52 season. It operates about 12 weeks of the year for the spring season. Sales were highest in 1955, when \$312,015 was reported. Since then, they have shown a declining trend and were much smaller the last three seasons (Table 44). In 1960, sales were \$56,458.

The Brooker market income has been very erratic, ranging from \$1,654 to \$8,369. The market showed operational

TABLE 42.--Bonifay State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1958-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1958	11,304	600	3,340	(2,740)	2,400	48,943
1959	27,798	1,062	3,322	(2,260)	2,400	48,170
1960	19,889	545	3,221	(2,676)	2,400	56,109

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

TABLE 43.--Bonifay State Farmers' Market for vegetables:
Annual sales volume, by items, 1958-60

Item	Unit	Season Ending		
		1958	1959	1960
Beans, Lima	Bushel	259	649	538
Beans, pole	Bushel	. .	. .	. .
Beans, snap	Bushel	31	6	106
Cantaloupe	40 Melons	28	270	182
Corn, sweet	5 Dozen	51	0	89
Cucumbers	Bushel	437	100	142
Okra	Bushel	58	67	118
Peas, southern	Bushel	1,199	2,908	3,078
Peppers	Bushel	1	20	3
Potatoes, Irish	50 Pounds	87	38	21
Potatoes, sweet	Bushel	. .	1,106	360
Squash	Bushel	76	6	14
Tomatoes	60 Pounds	1,661	648	447
Watermelons	10 Melons	1,207	2,671	1,746

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 44.-- Brooker State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1952-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1952	251,711	3,173	1,628	1,545	1,200	12,073
1953	235,090	4,811	7,856	(3,045)	6,412	22,985
1954	163,584	8,369	7,762	607	4,530	60,573
1955	312,015	8,026	8,165	(139)	4,888	95,832
1956	239,541	5,309	8,489	(3,180)	4,433	112,747
1957	191,136	4,829	7,554	(2,725)	4,308	118,796
1958	54,645	2,879	8,096	(5,217)	4,804	118,796
1959	44,435	1,654	7,810	(6,156)	4,337	119,386
1960	56,458	3,953	6,080	(2,127)	3,235	119,450

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

losses in seven out of nine years that ranged from \$139 to \$6,156. Profits were \$1,545 in 1952 and \$607 in 1954. Personnel expenses moved up sharply between the first two years of operation, increasing from \$1,200 to \$6,412. Since 1953, personnel expenses have been around \$4,500, except for 1960, when they were \$3,235. Fixed assets at Brooker increased from \$12,073 in 1952, to \$119,450 in 1960. Fifteen different vegetable items have been reported sold, of which cabbage and sweet potatoes have been reported once (Table 45). Tomatoes have been reported occasionally. In the first year of operation, 14 vegetable items were sold. In 1960, only six items were handled and Irish potatoes, peppers, and snap beans were the largest-volume items. This compared with green corn, southern peas, Irish potatoes, Lima beans, and peppers, which were all relatively large-volume items for this market the first year.

Gadsden County.—The Gadsden County state vegetable market has operated continuously since the 1954-55 season. It is located in an area of limited vegetable production and operates about 12 weeks of the year. It has a split operating season during the fall and spring. Sales increased from \$23,758 in 1955 to \$284,148 in 1959. They were \$136,462 in 1960 (Table 46).

TABLE 45.--Brooker State Farmers' Market for vegetables: Annual sales volume, by items, 1952-60

Item	Unit	Season		
		1952	1953	1954
Beans, Lima	Bushel	14,253	7,991	8,704
Beans, pole	Bushel	6,114	4,622	2,185
Beans, snap	Bushel	6,878	10,399	14,237
Cabbage	50 Pounds	215	..	..
Cantaloupe	40 Melons	192	17	50
Corn, sweet	Crate	22,487	9,578	7,858
Cucumbers	Bushel	9,090	3,006	19,487
Eggplant	Bushel	287	198	382
Okra	Bushel	44	169	49
Peas, southern	Bushel	17,635	11,451	8,911
Peppers	Bushel	12,925	7,492	19,594
Potatoes, Irish	50 Pounds	14,687	62,020	41,171
Potatoes, sweet	Bushel	..	..	..
Squash	Bushel	6,047	3,460	2,053
Tomatoes	60 Pounds	2	7	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 45.--Extension

Ending					
1955	1956	1957	1958	1959	1960
5,952	5,945	7,010	5,060	674	1,347
2,039	2,034	3,626	116	..	..
17,607	3,945	6,686	4,214	2,885	9,132
..
45	40	..	204	..	..
8,652	7,097	6,983	5,109	2,582	..
3,123	8,479	9,830	..	2,113	4,975
93	197	162	77	32	..
20	80	120	26	..	..
7,262	8,083	12,756	6,110	1,511	..
12,485	3,983	10,907	2,355	1,345	10,829
59,488	57,854	46,155	7,060	55	13,262
..	..	..	..	7,668	..
3,596	2,568	2,101	1,830	617	637
..	..	63	..	..	..

TABLE 46.--Gadsden County State Farmers' Market for vegetables:
Annual sales, major operational figures, and fixed assets valuation,
1955-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1955	23,758	1,024	5,680	(4,656)	2,858	43,833
1956	89,530	2,091	5,354	(3,263)	3,600	57,536
1957	170,777	4,412	6,706	(2,292)	3,869	78,396
1958	193,785	4,017	8,127	(4,110)	4,738	88,015
1959	284,148	6,006	8,539	(2,533)	5,220	81,647
1960	136,462	3,999	9,302	(5,303)	5,980	120,574

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLoss shown in parentheses ().

Income at the Gadsden County market has been inadequate to cover expenses. Operational losses have ranged from \$2,292 to \$5,303 annually. Personnel expenses have increased progressively each year from \$2,858 in 1955 to \$5,980 in 1960. Fixed assets increased from \$43,833 in 1955 to \$120,574 in 1960.

Eighteen different vegetables have been sold at the Gadsden County market at various times (Table 47). Ten of these were reported for only one or two years. Fall pole beans and cucumbers have been the main crops sold.

Starke.--The state vegetable market at Starke is located in an area of small farms where vegetable production is primarily a part-time operation. The market has been open about 24 weeks of the year during the fall, winter, and spring seasons since 1937-38. The fall business is devoted entirely to pecans. Sales increased from \$1,789 in 1938 to \$490,290 in 1950. Sales declined after 1950, and were \$199,340 in 1960 (Table 48).

Out of 23 years of operation, income has been enough to pay expenses only in 1945 and 1950, when profits of \$318 and \$618 respectively were reported. In other years, operating losses ranged from \$4 to \$6,605 annually. Personnel expenses have been variable. In 1938, they were \$251, and,

TABLE 47.--Gadsden County State Farmers' Market for vegetables:
Annual sales volume, by items, 1955-60

Item	Unit	Season	
		1955	1956
Beans, Lima	Bushel	4	1
Beans, pole	Bushel	1,042	8,241
Beans, snap	Bushel	240	1,037
Broccoli	50 Pounds	. .	. .
Cabbage	50 Pounds	. .	. .
Cucumbers	Bushel	2,530	11,971
Eggplant	Bushel	. .	. .
Greens	Dozen bunches	6,594	950
Okra	Bushel	2	7
Onions	Dozen bunches	89	. .
Peas, southern	Bushel	103	21
Peppers	Bushel	. .	. .
Potatoes, Irish	50 Pounds	. .	108
Potatoes, sweet	Bushel	166	25
Spinach	Bushel	. .	. .
Squash	Bushel	2,978	8,470
Tomatoes	60 Pounds	415	247
Watermelon	10 Melons	. .	723

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 47.--Extension

Ending			
1957	1958	1959	1960
43,176	54,248	50,936	15,407
. .	1,977	. .	38
. .	. .	2,622	. .
. .	. .	25,738	11,250
12,171	2,470	3,769	7,446
. .	. .	. .	957
628	. .	8,001	. .
18	. .	. .	. .
.
64	. .	. .	. .
. .	525	. .	. .
.
.
4,642	. .	9,679	. .
2,621	828	118	709
. .	. .	. .	2,353
.

TABLE 48.--Starke State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1938-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1938	1,789	192	461	(269)	251	10,270
1939	36,472	358	946	(588)	359	18,181
1940	277,803	2,366	2,782	(416)	1,906	27,818
1941	175,736	2,480	2,484	(4)	2,019	32,680
1942	111,964	3,459	4,013	(554)	3,138	33,707
1943	111,537	3,215	5,223	(2,008)	2,090	33,912
1944	350,884	2,184	2,188	(4)	1,333	33,879
1945	60,520	1,190	872	318	24	32,566
1946	4,017	263	2,218	(1,955)	1,402	32,419
1947	456,952	2,648	4,783	(2,135)	2,976	28,720
1948	118,753	1,237	7,842	(6,605)	4,351	28,796
1949	295,420	3,627	5,554	(1,927)	4,569	29,841
1950	490,290	5,509	4,891	618	3,249	40,883
1951	347,016	3,213	4,466	(1,253)	2,971	49,893
1952	268,745	4,383	7,271	(2,888)	4,461	53,457
1953	246,367	4,233	7,990	(3,757)	4,768	60,004
1954	271,524	7,473	8,893	(1,420)	4,902	73,701
1955	161,419	4,744	8,344	(3,600)	5,171	79,912
1956	209,894	4,212	5,409	(1,197)	1,687	79,945
1957	194,161	4,554	6,609	(2,055)	2,701	79,975
1958	117,228	4,614	5,357	(743)	2,156	81,375
1959	103,297	1,881	7,162	(5,281)	3,969	72,532
1960	199,340	3,438	7,463	(4,025)	4,348	74,445

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

by 1942, had increased to \$3,138. Personnel expenses fell to \$24 in 1945, but increased to \$5,171 in 1955. In 1960, they were \$4,348. Fixed assets increased from \$10,270 the first year to \$74,445 in 1960.

Twenty-seven different vegetable items were reported in one or more of the annual product sales reports (Table 49). Prior to the 1938-39 season, product sales were not classified or itemized. Sixteen of the vegetable items sold at the Starke market were reported for less than 5 of the 23 years of operation. No item was reported as handled every year. Lima beans, snap beans, sweet corn, southern peas, and peppers are the items that have been handled most consistently. Each was reported for 20 to 22 years. Cucumbers, eggplant, okra, Irish potatoes, squash, and strawberries have been handled 14 to 19 years. Sweet corn, peppers, and strawberries have been the volume items at Starke.

Toward the end of World War II, the Starke market was almost without vegetables, sweet corn being the only vegetable handled in 1944. Beer made up 95 per cent and pecans made up 2 per cent of sales in 1944.¹ In 1945, Lima beans, snap beans, sweet corn, and peppers were handled in

¹It is assumed that, under war-emergency conditions, alternative means of market utilization were desirable and a beer distributor leased space that otherwise would not have been used.

TABLE 49.--Starke State Farmers' Market for vegetables: Annual sales volume, by items, 1939-60

Item	Unit	Season			
		1939	1940	1941	1942
Beans, Lima	Bushel	16,482	18,411	3,164	1,512
Beans, snap	Bushel	2,049	5,056	6,621	11,084
Beets	Dozen bunches	..	..	48	..
Cabbage	50 Pounds	157	560	1,280	13,000
Cabbage, Chinese	50 Pounds	..	..	..	..
Cantaloupe	40 Melons	..	..	45	..
Carrots	Dozen bunches	..	..	400	404
Cauliflower	Crate	..	..	14	..
Celery	Crate	..	..	501	..
Corn, sweet	Crate	22,998	41,299	15,362	5,109
Cucumbers	Bushel	939	4,286	1,048	365
Eggplant	Bushel	..	..	434	..
Greens	Dozen bunches	..	16	3,923	1,658
Lettuce	Crate	..	..	511	..
Okra	Bushel	60	1,439	131	45
Onions	Dozen bunches	..	..	11	8
Peas, green	Bushel	..	..	231	20
Peas, southern	Bushel	741	10,989	2,942	1,293
Peppers	Bushel	93	2,100	1,272	6,608
Potatoes, Irish	50 Pounds	24	2,645	9,086	858
Potatoes, sweet	Bushel	..	..	1,230	2,479
Radishes	Dozen bunches	..	..	15	..
Spinach	Bushel	..	..	50	..
Squash	Bushel	651	784	772	459
Strawberries	24 Pints	..	78,095	43,916	34,190
Tomatoes	60 Pounds	312	5,450	2,946	230
Watermelons	10 Melons	9	135	258	25

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 49.--Extension

Ending						
1943	1944	1945	1946	1947	1948	1949
5,836	. .	700	. .	150	172	5,194
8,975	. .	330	. .	575	194	1,302
.
.
.
.
.
.
10,493	1,074	26,645	. .	30,692	5,158	22,250
285	130	863	1,283
29	314
.
.
12	100	2	24
.
4
3,307	725	158	1,151
116	. .	308	. .	500	809	1,993
3,038	239	5	329
.
.
.
622	100	20	22
10,521	57,797	19,512	43,207
248	57	19
.	200	. .	. .	. .

TABLE 49.--Continued

Item	Unit	Season			
		1950	1951	1952	1953
Beans, Lima	Bushel	2,932	972	465	1,551
Beans, snap	Bushel	2,453	1,859	1,054	3,133
Beets	Dozen bunches	..	..	..	..
Cabbage	50 Pounds	..	..	..	..
Cabbage, Chinese	50 Pounds	..	..	..	..
Cantaloupe	40 Melons	..	..	..	..
Carrots	Dozen bunches	..	..	..	..
Cauliflower	Crate	..	..	..	..
Celery	Crate	..	..	..	..
Corn, sweet	Crate	50,392	32,256	49,548	19,514
Cucumbers	Bushel	136	22	3	89
Eggplant	Bushel	..	36	71	1,123
Greens	Dozen bunches	..	..	..	..
Lettuce	Crate	..	..	..	..
Okra	Bushel	..	..	..	7
Onions	Dozen bunches	..	..	..	..
Peas, green	Bushel	..	..	..	..
Peas, southern	Bushel	1,053	850	271	1,944
Peppers	Bushel	7,850	3,854	1,858	18,319
Potatoes, Irish	50 Pounds	1,343	938	378	5,044
Potatoes, sweet	Bushel	..	..	..	..
Radishes	Dozen bunches	..	..	..	..
Spinach	Bushel	..	..	..	..
Squash	Bushel	28	27	20	155
Strawberries	24 Pints	69,126	36,165	37,701	19,302
Tomatoes	60 Pounds	76	280	309	210
Watermelons	10 Melons	..	..	..	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 49.--Extension

Ending						
1954	1955	1956	1957	1958	1959	1960
522	1,417	610	2,243	539	54	68
1,530	2,303	793	2,833	878	80	. .
.
.
. .	1,000	. .	. .	. .	. .	. .
.
.
.
50,020	15,771	5,862	12,844	14,971	2,772	7,934
21,123	3,272	. .	8,499	7,238	2,361	. .
75	1,434	1,541	1,297	50	461	523
.
.
15	34	. .	9	6	. .	. .
.
.
4,077	2,358	1,772	2,870	1,421	116	434
10,401	13,532	4,777	12,568	2,731	2,536	7,290
704	1,463	167	770	. .	. .	. .
.
.
.
. .	49	. .	382	397	114	. .
15,449	10,954	15,459	10,299	8,717	11,743	22,233
. .	115	44	29	. .	. .	. .
.

small quantities, along with a few pecans. Pecans and watermelons were the only products sold in 1946, and pecans accounted for 80 per cent of sales value. In 1947, a variety of vegetable items was again reported.

Area 1 summary.--The four vegetable markets in Area 1, as a group, had relatively low sales, and their income seldom paid their operating expenses. Annual sales for all vegetable markets combined in this area ranged from \$2,000 to \$556,000 (Table 50). The maximum was reached in 1957. Sales in 1960 were \$412,000. With limited sales, it was difficult to collect sufficient income to pay expenses of operation. The vegetable markets in Area 1, as a group, failed to pay operating expenses in all except 2 out of 23 years. Total loss for the 23 years was \$92,018 and average annual loss was \$4,001. Fixed assets of the markets in this area have increased in recent years to the point where they are approaching the value of annual sales.

TABLE 50.--All Florida state vegetable markets in Area 1: Annual major operating figures and fixed assets valuation of four state vegetable markets, 1935-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(\$1,000)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1935	..	..	..	..	..	..
1936	..	..	..	..	..	..
1937	..	..	..	..	..	..
1938	2	192	461	(269)	251	10,270
1939	36	358	946	(588)	359	18,181
1940	278	2,366	2,782	(416)	1,906	27,818
1941	176	2,480	2,484	(4)	2,019	32,680
1942	112	3,459	4,013	(554)	3,138	33,707
1943	112	3,215	5,223	(2,008)	2,090	33,912
1944	351	2,184	2,188	(4)	1,333	33,879
1945	61	1,190	872	318	24	32,566
1946	4	263	2,218	(1,955)	1,402	32,419
1947	457	2,648	4,783	(2,135)	2,976	28,720
1948	119	1,237	7,842	(6,605)	4,351	28,796
1949	295	3,627	5,554	(1,927)	4,569	29,841
1950	490	5,509	4,891	618	3,249	40,883
1951	347	3,213	4,466	(1,253)	2,971	49,893
1952	520	7,556	8,899	(1,343)	5,661	65,530
1953	481	9,044	15,846	(6,802)	11,180	82,989
1954	435	15,842	16,655	(813)	9,432	134,274
1955	497	13,794	22,189	(8,395)	12,917	219,577
1956	539	11,612	19,252	(7,640)	9,720	250,228
1957	556	13,795	20,867	(7,072)	10,878	277,167
1958	377	12,110	24,920	(12,810)	14,098	337,129
1959	460	10,603	26,833	(16,230)	15,926	321,735
1960	412	11,935	26,066	(14,131)	15,963	370,578
Total	..	..	..	(92,018)	..	..
Average	..	..	..	(4,001)	..	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLoss shown in parentheses ().

Area 2

Of seven state vegetable markets built in Area 2, only five were operating in 1960.

Bushnell.--The Bushnell state vegetable market was opened in the 1941-42 season. Prior to this, some vegetables were handled through the Bushnell state livestock market. The vegetable market operated for four years. Apparently, it was established without the endorsement of local growers. They refused to patronize the market since there was a cooperative auction at Webster, six miles away, which was struggling for volume. Growers preferred their organization over the state market. A study by the United States Department of Agriculture stated the Bushnell market was a failure due to insufficient volume to attract buyers and because revenue would not cover operational costs.²

The Bushnell state vegetable market was in an area of small-acreage vegetable growers with limited production. Information available indicates that operations at this market were probably limited to a few weeks in the spring of the year.

²U. S., Department of Agriculture, Concentration Markets for Fruits and Vegetables in Sumter and Lake Counties, Florida (Washington: Production and Marketing Administration, 1949, Mimeographed).

Sales at the Bushnell market varied widely from year to year (Table 51). Sales were \$138,643 in 1942, and \$19,838 in 1943. No sales were reported in 1944. Sales of \$92,438 and \$67,423 were reported for 1945 and 1946, respectively. An operational gain was shown in 1942. This was also the year of highest personnel expenses. Fixed assets of just under \$33,000 were reported for all operating years.

Ten vegetable items were reported handled at the Bushnell market in 1942 (Table 52). Cucumbers and tomatoes were the largest-volume items. Five items were handled in 1943 and four in 1945. During the last year of operation, only cucumbers were reported.

Fort Pierce.---The state vegetable market at Fort Pierce has operated continuously for 20 years. This market is in an important area for spring and fall tomatoes. The market operates about 23 weeks a year.

During 1941, the first year of operation, sales were only \$20,508. However, they increased steadily to near the \$5,000,000 level by 1952 (Table 53). Sales decreased slightly for six years after 1952; but, in 1959, they exceeded \$5,000,000. Sales in 1960 were \$4,830,545.

Income was adequate in most years to cover expenses and leave a substantial operating profit. There was a loss

TABLE 51.--Bushnell State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1942-46

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1942	138,643	3,073	2,716	357	1,713	32,937
1943	19,838	232	605	(373)	42	32,750
1944	. .	102	391	(289)	. .	32,751
1945	92,438	357	652	(295)	. .	32,593
1946	67,423	353	655	(302)	. .	32,593

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLoss shown in parentheses ().

TABLE 52.--Bushnell State Farmers' Market for vegetables: Annual sales volume, by items, 1942-46

Item	Unit	Season Ending				
		1942	1943	1944	1945	1946
Beans, snap	Bushel	2,188	23	. .	120	. .
Carrots	Dozen bunches	2,652	. .	. .	. .	. .
Cucumbers	Bushel	54,796	2,842	. .	20,320	15,531
Greens	Dozen bunches	320	. .	. .	. .	. .
Onions	Dozen bunches	488	. .	. .	. .	. .
Peppers	Bushel	493	4	. .	1,620	. .
Potatoes, sweet	Bushel	112	. .	. .	. .	. .
Squash	Bushel	164	2	. .	150	. .
Tomatoes	60 Pounds	24,101	10,919	. .	. .	. .
Watermelons	10 Melons	15	. .	. .	. .	. .

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 53.--Fort Pierce State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1941-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1941	20,508	193	137	56	71	51,600
1942	41,030	905	2,700	(1,795)	1,882	53,323
1943	52,278	110	764	(654)	300	53,320
1944	190,869	4,986	4,003	983	3,005	54,181
1945	361,945	7,868	5,506	2,362	4,120	59,236
1946	974,668	12,490	8,034	4,456	4,676	68,783
1947	2,066,559	19,429	9,317	10,112	6,204	119,521
1948	3,526,590	31,150	13,408	17,742	8,644	158,263
1949	4,072,991	42,578	21,728	20,850	11,060	252,396
1950	4,398,246	54,433	33,203	21,230	12,677	211,027
1951	4,444,626	45,424	24,607	20,817	14,339	348,909
1952	4,977,164	42,054	23,788	18,266	15,594	431,806
1953	3,450,048	39,032	25,428	13,604	16,415	432,361
1954	2,756,295	47,021	40,317	6,704	16,968	546,980
1955	4,254,145	53,567	65,999	(12,432)	21,080	553,683
1956	3,156,553	50,062	33,415	16,647	16,834	554,710
1957	3,750,641	38,444	35,040	3,404	18,911	604,334
1958	3,138,106	35,734	30,927	4,807	18,345	645,995
1959	5,010,946	44,683	29,192	15,491	17,419	662,288
1960	4,830,545	44,473	30,761	13,712	18,299	675,419

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLoss shown in parentheses ().

in only three years -- 1942, 1943, and 1955. Losses varied from \$654 to \$12,432; profits, from \$56 to \$21,230. Profits exceeded \$10,000 for more than one-half of the years they were shown, \$15,000 for seven years, and \$20,000 for three years. With many years of substantial profits, this market has been a heavy contributor to the General Inspection Fund.

During 1955, losses exceeded \$12,000, but expenses were \$65,999, the highest ever reported. Expenses were high because \$23,652 was spent on building maintenance. It is quite possible that these maintenance expenses could have been spread over a period of several years and the market could have reported a gain in 1955.

Personnel expenses ranged from \$71 the first year to \$21,080 in 1955. Since 1955, they have been reduced and were \$18,299 in 1960. A large part of the 1955 personnel expenditures was for building maintenance.

Fixed assets at the Fort Pierce state market were \$51,600 the first year, and \$675,419 in 1960.

Twenty-five different vegetable items have been reported handled at various times. Tomatoes are the only product handled each year (Table 54). They have also been the largest-volume item, except for the second year, when volume of peppers was first. Cucumbers and peppers have been reported

TABLE 54.--Fort Pierce State Farmers' Market for vegetables:
Annual sales volume, by items, 1941-60

Item	Unit	Season		
		1941	1942	1943
Beans, Lima	Bushel	144	219	154
Beans, pole	Bushel	38	..	..
Beans, snap	Bushel	771	1,546	1,203
Beets	Dozen bunches	..	6	..
Cabbage	50 Pounds	132	440	1,160
Cabbage, Chinese	50 Pounds	..	..	8
Cantaloupe	40 Melons	..	..	..
Carrots	Dozen bunches	6	26	..
Cauliflower	Crate	..	1	..
Celery	Crate	..	..	7
Corn, sweet	Crate	..	..	..
Cucumbers	Bushel	272	398	118
Eggplant	Bushel	541	829	201
Greens	Dozen bunches	19	6	..
Okra	Bushel	5	6	151
Peas, green	Bushel	381	2,368	1,234
Peas, southern	Bushel	130	..	23
Peppers	Bushel	3,858	12,314	2,363
Potatoes, Irish	50 Pounds	173	2	..
Potatoes, sweet	Bushel	9	554	589
Radishes	Dozen bunches	7	..	..
Spinach	Bushel	4	2	..
Squash	Bushel	310	2,930	1,159
Tomatoes	60 Pounds	4,443	6,274	12,561
Watermelons	10 Melons	40	..	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 54.--Extension

Ending					
1944	1945	1946	1947	1948	1949
52	. .	. .	3,803	2,519	1,743
.
253	67	606	849	3,678	101
.
. .	5	. .	. .	245	80
.
. .	. .	. .	. .	. .	465
.
. .	. .	. .	. .	. .	1,179
.
. .	. .	. .	. .	2,472	208
2,173	17	1,711	8,133	18,338	56,526
1,357	381	16,243	4,611	2,140	170
.
. .	. .	29	437	210	102
75	149	134	45	2	7
6	. .	. .	2,189	1,373	339
2,429	616	1,346	4,852	2,000	2,800
. .	. .	200	. .	. .	. .
99	129	. .	. .	. .	. .
. .	. .	. .	. .	. .	124
. .	. .	. .	. .	29	. .
2,309	3,167	5,108	8,330	13,448	12,077
52,288	86,207	179,605	365,420	734,020	969,461
. .	4	480	5	23	. .

TABLE 54.--Continued

Item	Unit	Season		
		1950	1951	1952
Beans, Lima	Bushel	. .	18	2,403
Beans, pole	Bushel	. .	. .	. .
Beans, snap	Bushel	. .	. .	26
Beets	Dozen bunches	. .	. .	. .
Cabbage	50 Pounds	. .	. .	. .
Cabbage, Chinese	50 Pounds	. .	. .	. .
Cantaloupe	40 Melons	. .	. .	. .
Carrots	Dozen bunches	. .	. .	. .
Cauliflower	Crate	. .	. .	. .
Celery	Crate	. .	. .	. .
Corn, sweet	Crate	. .	. .	. .
Cucumbers	Bushel	97,645	55,433	52,324
Eggplant	Bushel	3,264	77	2
Greens	Dozen bunches	. .	. .	. .
Okra	Bushel	3	20	. .
Peas, green	Bushel	. .	. .	. .
Peas, southern	Bushel	. .	. .	. .
Peppers	Bushel	29,594	20,242	7,321
Potatoes, Irish	50 Pounds	. .	. .	. .
Potatoes, sweet	Bushel	. .	. .	. .
Radishes	Dozen bunches	. .	. .	. .
Spinach	Bushel	. .	. .	. .
Squash	Bushel	3,880	112	1,119
Tomatoes	60 Pounds	1,037,284	1,063,143	994,909
Watermelons	10 Melons	. .	. .	. .

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 54.--Extension

Ending					
1953	1954	1955	1956	1957	1958
.	.	.	.	.	11
.
.	225	.	.	.	149
.
.
.
.
.
.
.
50,175	41,099	36,482	19,610	18,213	1,966
4,531	50	.	.	.	.
.
.	.	.	1	.	.
.
.	200	.	.	.	565
2,171	6,113	.	24,643	3,541	140
.	.	89,172	45,666	6,776	.
60,501	40,389	69,218	38,587	11,184	.
.
.
197	.	.	.	.	.
931,789	812,473	1,100,039	1,238,442	858,392	936,788
.

TABLE 54.--Continued

Item	Unit	Season Ending	
		1959	1960
Beans, Lima	Bushel	. .	. .
Beans, pole	Bushel	. .	. .
Beans, snap	Bushel	. .	. .
Beets	Dozen bunches	. .	. .
Cabbage	50 Pounds	. .	. .
Cabbage, Chinese	50 Pounds	. .	. .
Cantaloupe	40 Melons	. .	. .
Carrots	Dozen bunches	. .	. .
Cauliflower	Crate	. .	. .
Celery	Crate	. .	. .
Corn, sweet	Crate	. .	. .
Cucumbers	Bushel	. .	. .
Eggplant	Bushel	. .	. .
Greens	Dozen bunches	. .	. .
Okra	Bushel	. .	. .
Peas, green	Bushel	. .	. .
Peas, southern	Bushel	691	236
Peppers	Bushel	291	. .
Potatoes, Irish	50 Pounds	. .	. .
Potatoes, sweet	Bushel	1,465	9,515
Radishes	Dozen bunches	. .	. .
Spinach	Bushel	. .	. .
Squash	Bushel	. .	. .
Tomatoes	60 Pounds	1,381,645	1,290,769
Watermelons	10 Melons	. .	. .

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

for 18 of 20 years. Five items have been reported or handled only one year; five, two years; and four items for three to six years. In 1960, only three items -- southern peas, sweet potatoes, and tomatoes -- were reported.

Palatka.--The Palatka state vegetable market has operated since 1938. It has reported a variety of products that are not in the vegetable classification. Some citrus was reported occasionally. Until the livestock market opened, livestock was recorded in the vegetable records. Meat and canned goods information was available for several years, as was information concerning gladioli and deer tongue. The market operates about 24 weeks each year.

Sales were \$136,117 in 1938, but decreased to \$35,122 in 1943 (Table 55). This decline was undoubtedly influenced by war measures, and the separation of the livestock market from the vegetable market in 1942. Sales rose to \$361,232 in 1944 and increased to a high of \$1,717,313 in 1960.

Income tended upward from \$2,825 in 1938 to a high of \$13,223 in 1944. In 1960, income was \$9,235. Income has covered operating expenses in all but 6 of the 23 years of operation. Operating expenses have increased in line with sales. As a result, operational profits have never been very

TABLE 55.--Palatka State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1938-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1938	136,117	2,825	2,710	115	1,841	42,685
1939	135,650	4,901	4,251	650	2,769	64,315
1940	116,714	5,564	7,523	(1,959)	3,093	71,126
1941	124,585	4,751	5,140	(389)	3,262	48,882
1942	40,087	4,680	4,182	498	3,043	42,508
1943	35,122	3,327	3,033	294	1,142	42,021
1944	361,232	13,223	8,567	4,656	4,512	46,303
1945	143,648	4,064	6,692	(2,628)	4,020	46,103
1946	685,414	3,570	5,599	(2,029)	3,786	45,036
1947	530,732	3,636	2,536	2,100	1,889	44,961
1948	519,166	4,103	2,877	1,226	1,500	44,433
1949	868,856	3,858	3,927	(69)	1,500	44,422
1950	720,124	3,969	2,149	1,820	1,540	44,721
1951	766,099	4,652	3,657	995	1,650	44,721
1952	1,070,449	4,698	2,910	1,788	1,863	44,722
1953	810,279	6,174	3,324	2,850	2,049	51,279
1954	815,717	5,980	5,620	360	2,249	73,853
1955	1,342,706	6,614	6,563	51	3,369	83,768
1956	1,285,515	8,780	8,818	(38)	3,357	111,357
1957	536,754	10,505	5,844	4,661	2,815	112,134
1958	687,377	9,578	6,462	3,116	3,476	125,877
1959	950,742	10,436	7,015	3,421	3,889	125,466
1960	1,717,313	9,235	6,907	2,328	4,662	133,777

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

large, ranging from \$51 to \$4,661. Likewise, losses reported for six years have not been large. They ranged from \$38 to \$2,628. Personnel expenses increased throughout the period, from \$1,841 in 1938 to \$4,662 in 1960. Fixed assets increased from \$42,685 in 1938 to \$71,126 in 1940. In 1960, they were \$133,777.

Twenty-six vegetable items have been handled during one or more years of operation (Table 56). Product sales volumes were available beginning with the 1938-39 season. Cabbage is the only item reported each year. Irish potatoes are reported for all but one year for which information is available. Products handled other than cabbage and Irish potatoes have been reported comparatively few years. Greens are reported for 11 years, while other items are reported for 8 years or less. Six items are reported only once. In 1960, only three vegetable items were handled -- cabbage, Irish potatoes, and watermelons. Cabbage was the largest-volume item during the first half of the operational period; and Irish potatoes, during the second.

Palmetto.--The Palmetto state vegetable market was located in an area of small-acreage producers. It was opened for business during the 1937-38 season and operated for 22 years. It was sold at the end of the 1958-59 season. Based on available

TABLE 56.--Palatka State Farmers' Market for vegetables: Annual sales volume, by items, 1939-60

Item	Unit	Season			
		1939	1940	1941	1942
Beans, Lima	Bushel	32	..	..	..
Beans, snap	Bushel	3,056	576	379	76
Beets	Dozen bunches	54	65	30	..
Broccoli	50 Pounds	2	..	..	..
Cabbage	50 Pounds	14,920	67,880	81,324	91,680
Cantaloupe	40 Melons	..	47	..	..
Carrots	Dozen bunches	141	..	93	44
Cauliflower	Crate	18	..	..	..
Celery	Crate	6	..	..	..
Corn, sweet	Crate	42	..	..	..
Cucumbers	Bushel	74	258	121	10
Eggplant	Bushel	21	7	2	..
Greens	Dozen bunches	725	2,396	4,781	6,638
Lettuce	Crate	..	58	..	..
Okra	Bushel	32	41	29	..
Onions	Dozen bunches	132	..	..	162
Peas, green	Bushel	..	6	79	203
Peas, Southern	Bushel	143	..	..	..
Peppers	Bushel	..	1	..	..
Potatoes, Irish	50 Pounds	..	8,156	3,203	1,625
Potatoes, sweet	Bushel	..	37	176	261
Radishes	Dozen bunches	..	43	30	1
Spinach	Bushel	..	..	..	1
Squash	Bushel	..	25	19	3
Tomatoes	60 Pounds	..	38	..	..
Watermelons	10 Melons	..	33	17	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 56.--Extension

Ending						
1943	1944	1945	1946	1947	1948	1949
..
..	19	..	..	..	..	..
..	86	..	..	..	..	..
..	4	..	..	..	..	..
21,240	208,781	93,800	238,380	280,300	200,010	130,460
..
..	12	..	..	..	..	..
..
..
..
..	4	..	..	1,400	2,850	..
..
1,291	2,255	16	303	..	..	..
..
..	314	309	15	70	..	..
..	109	..	..	..	..	..
28	727	..	..	..	..	..
..	29	..	25	..	..	..
..
1,262	22,471	46,358	97,908	120	3,350	48,000
..	661	..	..	..	..	..
..
..
..	1	..	..	..	..	..
..	15	10	200	80	..	..
..	..	200	65	..	..	..

TABLE 56.--Continued

Item	Unit	Season			
		1950	1951	1952	1953
Beans, Lima	Bushel	..	..	..	..
Beans, snap	Bushel	..	..	..	..
Beets	Dozen bunches	..	..	..	..
Broccoli	50 Pounds	..	..	..	..
Cabbage	50 Pounds	188,860	212,620	305,895	349,803
Cantaloupe	40 Melons	..	..	..	..
Carrots	Dozen bunches	..	..	..	..
Cauliflower	Crate	3,000	24,375	6,825	..
Celery	Crate	..	..	..	..
Corn, sweet	Crate	6,556	..	..	..
Cucumbers	Bushel	..	..	..	..
Eggplant	Bushel	..	..	..	..
Greens	Dozen bunches	..	4,250	6,362	1,590
Lettuce	Crate	..	..	..	..
Okra	Bushel	..	..	..	..
Onions	Dozen bunches	..	..	..	..
Peas, green	Bushel	..	..	..	..
Peas, Southern	Bushel	..	..	..	..
Peppers	Bushel	..	..	..	..
Potatoes, Irish	50 Pounds	2,241	54,200	146,020	212,000
Potatoes, sweet	Bushel	..	..	..	..
Radishes	Dozen bunches	..	..	..	..
Spinach	Bushel	..	..	..	..
Squash	Bushel	..	..	..	..
Tomatoes	60 Pounds	..	2,100	685	..
Watermelons	10 Melons	..	..	..	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 56.--Extension

Ending						
1954	1955	1956	1957	1958	1959	1960
..
..
..
586,480	178,884	228,003	67,254	141,405	125,675	155,190
..
..
..
..
..
..	3,562	..	..
..
..
..
..
..
..
113,765	491,020	402,555	313,835	225,400	148,460	330,684
..
..
..
..
..	85	..	..	..	..	..
5,234	24,000

data, it probably was operated about 24 weeks per year.

During the first year of operation, sales were \$19,086 (Table 57). They increased to a high of \$448,409 in 1944 but decreased gradually, and were \$298,428 the last year of operation. Income was lowest the first year, \$1,737, and highest in 1944 when it was \$8,919. Even the year that the market was closed, income was adequate to cover operating expenses, as it was for 13 out of the 22 years it operated. Profits ranged from \$334 to \$3,047. Operational losses that ranged from \$921 to \$4,161 were reported for nine years.

Personnel expenses showed a period of increase and then a decrease. From 1938 to 1952, they increased from \$2,374 to \$8,081. Personnel expenses were small after 1953. The market's facilities were leased to individual operators for a number of years near the end of its operation and personnel expenses were charged to the lessee. In 1959, they were only \$550. Fixed assets were \$24,234 in 1938, and \$80,955 in 1958, the last year they were reported.

For at least one year, 29 different vegetable items were reported by the Palmetto state market (Table 58). Sales volume for individual items are available since 1939. None of the items listed are reported each year. Tomatoes, the

TABLE 57.--Palmetto State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1938-59

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1938	19,086	1,737	3,243	(1,506)	2,374	24,234
1939	34,733	2,508	4,159	(1,651)	2,968	20,703
1940	89,768	4,665	4,309	356	2,643	24,433
1941	289,728	5,401	4,405	996	3,069	16,157
1942	233,806	7,864	4,817	3,047	3,324	28,611
1943	435,505	7,064	4,959	2,105	4,226	29,195
1944	448,409	8,919	7,564	1,355	6,653	38,060
1945	365,236	6,147	5,500	647	4,624	38,194
1946	437,985	7,333	6,349	984	5,078	39,882
1947	319,501	5,100	6,999	(1,899)	5,694	59,005
1948	419,972	6,522	7,629	(1,107)	5,658	59,449
1949	262,747	5,331	7,363	(2,032)	5,511	58,262
1950	160,261	5,738	7,590	(1,852)	6,352	58,263
1951	262,043	6,802	7,798	(996)	6,287	58,263
1952	325,843	8,441	9,362	(921)	8,081	62,302
1953	67,748	5,075	9,236	(4,161)	7,330	62,486
1954	139,129	2,531	2,197	334	740	84,155
1955	282,905	2,607	1,511	1,096	9	84,155
1956	130,986	2,780	1,954	826	481	80,910
1957	250,624	3,290	1,556	1,734	. .	80,955
1958	321,562	3,370	1,349	2,021	. .	80,955
1959	298,428	3,338	1,594	1,744	550	Sold 1/21/59

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLoss shown in parentheses ().

TABLE 58.--Palmetto State Farmers' Market for vegetables: Annual sales volume, by items, 1939-59

Item	Unit	Season			
		1939	1940	1941	1942
Beans, Lima	Bushel	..	..	..	..
Beans, pole	Bushel	..	..	..	..
Beans, snap	Bushel	84	307	486	685
Beets	Dozen bunches	..	..	7	..
Broccoli	50 Pounds	..	..	..	..
Cabbage	50 Pounds	..	..	92	12,320
Cabbage, Chinese	50 Pounds	..	..	..	..
Cantaloupe	40 Melons	..	..	..	..
Carrots	Dozen bunches	..	..	4	..
Cauliflower	Crate	..	..	..	..
Celery	Crate	..	..	..	..
Corn, sweet	Crate	..	..	..	..
Cucumbers	Bushel	..	2,484	45	30
Eggplant	Bushel	243	65	5,197	7,440
Endive and escarole	Bushel	..	..	..	..
Greens	Dozen bunches	..	..	..	..
Lettuce	Crate	..	..	..	..
Okra	Bushel	..	..	..	..
Onions	Dozen bunches	..	..	..	3
Peas, green	Bushel	10	3	61	63
Peas, southern	Bushel	..	..	..	..
Peppers	Bushel	419	301	20,309	15,378
Potatoes, Irish	50 Pounds	2	93	7	21
Potatoes, sweet	Bushel	..	..	..	..
Radishes	Dozen bunches	..	..	..	..
Squash	Bushel	32	89	526	828
Strawberries	24 Pints	3	..	2,307	719
Tomatoes	60 Pounds	32,512	73,965	136,474	107,305
Watermelons	10 Melons	..	..	..	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 58.--Extension

Ending						
1943	1944	1945	1946	1947	1948	1949
..	..	66	22	190	136	36
..	..	..	..	2,377	2,933	1,750
755	699	214	1,189	2,880	2,757	58
..	6	..	..	..	..	..
2,040	..	..	411	6	173	..
..
..	..	..	..	1	16	..
..	..	..	..	..	..	1
..	6	..	25	..	..	..
..	6	..	..	..	..	..
5	1	..	14	..	49	..
67	749	126	843	637	305	92
4,446	2,815	200	3,878	2,865	1,038	1,683
..	..	..	3	..	..	..
..	..	..	6	..	2	..
..	..	..	73	..	..	3
..	..	21	38	458	188	67
..	..	..	..	..	2	..
50	517	44	304	7	26	27
..	..	..	8	495	1,250	426
12,200	10,936	489	10,743	6,853	3,222	5,801
62	50	24	56	2	74	17
..
..
2,098	3,411	145	1,838	2,092	2,605	2,151
..	..	..	..	..	6	..
125,736	105,076	90,043	95,152	56,018	104,818	68,773
..	23	3	..	11	1	2

TABLE 58.--Continued

Item	Unit	Season		
		1950	1951	1952
Beans, Lima	Bushel	45	38	..
Peas, pole	Bushel	3,056	5,636	4,210
Beans, snap	Bushel	391	386	151
Beets	Dozen bunches	..	..	..
Broccoli	50 Pounds	..	..	..
Cabbage	50 Pounds	..	114	..
Cabbage, Chinese	50 Pounds	..	..	..
Cantaloupe	40 Melons	..	..	..
Carrots	Dozen bunches	..	..	..
Cauliflower	Crate	..	..	..
Celery	Crate	..	..	..
Corn, sweet	Crate	124	109	..
Cucumbers	Bushel	122	209	251
Eggplant	Bushel	2,138	988	2,748
Endive and escarole	Bushel	..	..	..
Greens	Dozen bunches	..	..	..
Lettuce	Crate	10	..	..
Okra	Bushel	49	40	..
Onions	Dozen bunches	..	..	..
Peas, green	Bushel	63	21	..
Peas, southern	Bushel	501	339	62
Peppers	Bushel	4,751	4,423	9,953
Potatoes, Irish	50 Pounds	57	219	..
Potatoes, sweet	Bushel	..	..	..
Radishes	Dozen bunches	..	..	..
Squash	Bushel	2,435	1,792	2,696
Strawberries	24 Pints	1	..	..
Tomatoes	60 Pounds	47,505	53,068	57,615
Watermelons	10 Melons	..	..	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 58.--Extension

Ending						
1953	1954	1955	1956	1957	1958	1959
622	14,233	27,312	14,747	20,958	250	300
..	25	300	175
..	100	..
..	50	..
..	110	2,625	3,825
..	50	100	2,300
..	203	17	375
..	50	..	..
..	20	500	175
..	50	2,800	2,500
..	30	200	150
65	245	140	850
1,077	355	90	75
..	20	125	..
..	130	..	..
..	21,042	49,007	17,419	6,988	2,000	1,200
..	10	100	25
..	140	..	..
..
28	500	..
4,378	85	235	400
..	400	27,825	13,600
..	250	325
..	10	..	..
260	911	..	..	85	200	375
..
17,817	11,577	11,733	..	5,940	50,042	34,500
..	600	210	930

largest-volume item, were sold 21 years; squash, 20 years; peppers, 19 years; snap beans and eggplant, 18 years; and cucumbers and Irish potatoes, 17 years. Other items were reported for 13 years or less; and 10, for 3 years or less.

Plant City.--The state vegetable market at Plant City opened in 1939, and has operated continuously. This market was also located in an area of small-acreage vegetable growers. Like several other state markets, it handled livestock for a brief period. Livestock and citrus are the non-vegetable items reported in significant quantities. Livestock was reported in 1941; and citrus, from 1940 through 1946. The market usually operates about 24 weeks each year.

Sales were \$2,286,893 the first year, 1939 (Table 59). This was the largest first-year sales for any of the state markets. During the 22 years of operation, sales have not varied by more than 50 per cent of the first year's sales. In 1960, sales were \$1,989,824.

Income did not show the same relative uniformity as sales. By 1955, income had increased to over 10 times what it was the first year. In 1939, income was \$5,368; \$58,976, in 1955; but dropped to \$49,596 in 1960. Income was adequate to cover operating expenses for all but 5 of the 22 years. Profits ranged from \$529 to \$13,181; and operational losses,

TABLE 59.--Plant City State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1939-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1939	2,286,893	5,368	2,823	2,545	2,268	249,595
1940	2,194,298	8,385	7,856	529	4,713	262,291
1941	1,903,222	7,600	7,824	(224)	5,438	188,911
1942	2,039,768	13,643	11,059	2,584	6,944	184,079
1943	1,879,657	17,261	11,969	5,292	6,709	182,029
1944	2,089,309	15,448	10,256	5,192	5,697	182,194
1945	2,000,215	17,406	10,449	6,957	6,977	193,449
1946	2,936,665	23,538	11,960	11,578	7,996	157,690
1947	3,117,571	21,411	13,820	7,591	11,560	286,165
1948	2,712,880	29,556	16,647	12,909	13,170	288,811
1949	2,924,623	27,880	17,150	10,730	13,839	297,073
1950	2,546,397	29,031	23,450	5,581	13,220	285,041
1951	2,980,338	33,681	24,733	8,948	17,154	286,039
1952	3,178,608	44,528	31,347	13,181	17,760	287,029
1953	2,870,968	48,996	44,693	4,303	19,672	287,449
1954	2,828,799	50,521	51,555	(1,034)	21,796	411,764
1955	2,989,509	58,976	48,391	10,585	22,910	469,755
1956	2,732,144	57,659	64,731	(7,072)	27,892	481,751
1957	2,646,852	54,525	60,991	(6,466)	26,531	493,707
1958	1,518,953	49,360	39,628	9,732	26,345	512,970
1959	2,188,182	44,760	45,250	(490)	30,353	516,030
1960	1,989,824	49,596	39,383	10,213	27,042	537,026

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

from \$224 to \$7,072. Personnel expenses increased from \$2,268 in 1939, to a high of \$30,353 in 1949. In 1960, they were \$27,042. Fixed assets at the Plant City market were \$249,595 in 1939. They declined to a low of \$157,690 in 1946, when a fire destroyed one of the buildings. In 1947, fixed assets were \$286,165, and \$537,026 in 1960.

Twenty-three vegetable items have been handled (Table 60). Ten of these -- Lima beans, snap beans, cucumbers, eggplants, okra, southern peas, peppers, Irish potatoes, squash, and strawberries -- have been handled each year. Two items -- pole beans and tomatoes -- have been reported for 21 years; and green peas and sweet corn, for 20 and 19 years, respectively. Other items have been reported from 1 to 14 years. Eight items were reported 3 times or less. Southern peas, peppers, and strawberries have been the largest-volume items.

Sanford.--The Sanford State Farmers' Market for vegetables was opened in the 1934-35 season, and has always operated about 30 weeks per year. When the market was established, Sanford was one of the most important areas in the state for commercial vegetable production. In addition, the Sanford market attracted vegetables from production areas far removed from the immediate locality, and it was known for many years

TABLE 60.--Plant City State Farmers' Market for vegetables:
Annual sales volume, by items, 1939-60

Item	Unit	Season			
		1939	1940	1941	1942
Beans, Lima	Bushel	49,826	33,187	21,017	13,354
Beans, pole	Bushel	1,330	. .	4,331	6,853
Beans, snap	Bushel	137,997	164,599	126,730	93,937
Beets	Dozen bunches	. .	. .	. .	. .
Broccoli	50 Pounds	. .	. .	. .	. .
Cabbage	50 Pounds	1,217	520	. .	. .
Cantaloupe	40 Melons	25	. .	. .	. .
Corn, sweet	Crates	51,270	28,761	22,137	18,663
Cucumbers	Bushel	15,290	33,642	34,231	35,415
Eggplant	Bushel	7,172	3,797	9,742	7,313
Greens	Dozen bunches	12	. .	. .	. .
Lettuce	Crates	. .	. .	. .	. .
Okra	Bushel	3,031	8,366	6,261	4,111
Onions	Dozen bunches	. .	. .	. .	. .
Peas, green	Bushel	. .	285	342	125
Peas, southern	Bushel	33,952	51,663	53,016	55,827
Peppers	Bushel	136,232	72,403	119,981	139,402
Potatoes, Irish	50 Pounds	12,591	47,328	35,101	29,368
Potatoes, sweet	Bushel	. .	. .	. .	. .
Radishes	Dozen bunches	2	. .	. .	. .
Squash	Bushel	36,561	66,075	61,721	51,255
Strawberries	24 Pints	553,709	271,187	247,413	232,058
Tomatoes	60 Pounds	121,044	125,067	129,502	125,210
Watermelons	10 Melons	2,050	637	464	386
Citrus	Boxes	. .	9,214	15,981	122,128

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 60.--Extension

Ending						
1943	1944	1945	1946	1947	1948	1949
17,022	13,857	16,383	33,295	17,233	39,208	31,985
4,109	965	409	2,246	11,172	13,624	18,622
93,199	59,425	24,888	33,908	51,092	36,446	35,497
..
..
..	7,600	..	..	..	..	..
..	..	20	..	..	..	..
11,981	16,749	10,640	13,844	15,369	11,329	19,316
5,227	3,537	12,436	31,461	30,002	49,617	17,298
3,362	11,896	3,248	14,264	18,407	25,857	32,213
..
..
2,843	6,468	6,487	3,375	6,570	5,694	11,762
38	160	..	..	..	..	..
..	603	8	73	146	17	45
57,514	80,030	81,351	115,618	115,551	163,471	112,428
76,611	91,326	105,642	219,040	139,556	280,427	130,569
19,298	31,915	7,136	17,976	10,620	16,429	22,263
..
..
45,981	44,152	51,386	61,492	10,689	90,878	70,632
130,974	72,212	99,838	178,829	237,621	152,437	162,303
46,230	50,926	54,710	41,566	16,153	53,523	50,035
183	702	74	524	1,576	820	375
118,080	216,016	14,205	42,906	..	..	..

TABLE 60.4-Continued

Item	Unit	Season			
		1950	1951	1952	1953
Beans, Lima	Bushel	18,357	39,388	42,779	42,962
Beans, pole	Bushel	22,240	51,067	61,492	59,221
Beans, snap	Bushel	31,289	25,767	18,919	46,625
Beets	Dozen bunches	. .	. .	85	. .
Broccoli	50 Pounds	. .	. .	30	. .
Cabbage	50 Pounds	. .	. .	261	. .
Cantaloupe	40 Melons	. .	. .	. .	. .
Corn, sweet	Crates	8,753	4,405	2,150	1,111
Cucumbers	Bushel	16,623	17,946	9,441	2,777
Eggplant	Bushel	8,648	18,537	41,750	40,587
Greens	Dozen bunches	. .	. .	30,255	. .
Lettuce	Crates	. .	. .	. .	. .
Okra	Bushel	7,822	23,712	50,047	41,562
Onions	Dozen bunches	. .	. .	678	. .
Peas, green	Bushel	25	14	109	79
Peas, southern	Bushel	69,597	179,431	128,471	154,503
Peppers	Bushel	203,799	214,050	268,166	316,122
Potatoes, Irish	50 Pounds	10,100	17,042	13,365	11,741
Potatoes, sweet	Bushel	. .	. .	. .	. .
Radishes	Dozen bunches	. .	. .	25	. .
Squash	Bushel	60,706	91,088	76,797	100,626
Strawberries	24 Pints	327,020	256,123	164,748	163,646
Tomatoes	60 Pounds	29,741	56,458	25,437	6,832
Watermelons	10 Melons	334	164	22	. .
Citrus	Boxes	. .	. .	. .	. .

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 60.--Extension

Ending						
1954	1955	1956	1957	1958	1959	1960
54,321	50,399	39,046	35,398	32,606	38,620	50,798
68,538	86,662	67,637	63,179	70,473	60,761	107,776
43,469	34,476	11,063	10,355	16,255	10,347	13,183
.
.
. .	1 .	. .	57	. .	. .	. .
. .	. .	. .	. .	. .	101	. .
133	153	43	. .	. .	131	. .
2,141	632	423	1,325	841	110	249
32,963	45,573	35,381	38,457	13,022	27,910	27,498
.
. .	11	. .	. .	. .	. .	. .
37,123	24,145	26,116	27,618	21,244	23,440	32,110
.
814	858	902	813	502	1,028	153
167,666	158,219	175,722	155,593	135,963	131,777	103,383
365,891	282,013	228,201	165,094	135,262	116,534	170,052
2,614	4,700	5,168	2,019	1,168	10,558	1,846
. .	. .	. .	. .	10	. .	. .
.
74,377	138,115	125,810	97,841	136,968	106,910	144,520
130,609	159,154	220,803	95,652	25,232	23,743	40,707
3,230	4,473	. .	429	172	316	630
.
.

as a center for obtaining mixed truck-loads. However, this type of operation has been moving southward, where a larger variety of items is available for a longer duration, in larger quantities.

Sales at Sanford were \$518,625 the opening year (Table 61). They moved generally upward and reached \$6,522,297 in 1952. Since 1952, the trend has been slightly downward. Sales were \$4,711,523 in 1960. Sales reported included annual quantities of citrus and items produced out of the state. The latter were handled as part of the mixed-load activity on a redistribution basis. Citrus was handled through packing-house operations provided at the market.

Annual income moved progressively upward. It was lowest during the first year and highest during 1960. In 23 out of 26 years, the market has shown a profit over operating expenses that ranged from \$293 to \$11,199. Losses ranged from \$422 to \$2,108. Personnel expenses were \$1,568 in 1935, \$17,198 in 1955 (the highest amount), and \$13,569 in 1960.

Fixed assets have increased with time and growth. They were \$57,614 in 1935 and \$518,512 in 1960. A fire, in 1957, reduced fixed assets for that year when the main building burned. However, market operations were continued at facilities on or near the market area. When the main

TABLE 61.--Sanford State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1935-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1935	518,625	3,091	2,345	746	1,568	57,614
1936	750,000	4,962	4,634	328	3,079	57,750
1937	493,102	4,187	4,609	(422)	2,950	67,602
1938	455,301	5,386	4,503	883	2,964	73,550
1939	534,473	6,441	6,148	293	4,344	83,143
1940	639,432	7,261	5,783	1,478	4,074	87,573
1941	670,856	8,010	7,383	627	5,286	85,404
1942	1,039,926	11,069	6,052	5,017	5,093	85,857
1943	1,748,035	8,231	6,254	1,977	4,969	87,711
1944	1,987,177	10,010	6,675	3,335	5,282	87,673
1945	2,059,160	10,483	6,996	3,487	5,275	88,568
1946	2,639,335	12,750	7,600	5,150	5,634	111,179
1947	2,308,019	13,828	8,593	5,235	6,773	121,307
1948	3,071,942	12,907	9,946	2,961	7,103	132,012
1949	4,625,641	17,851	10,997	6,854	7,634	132,755
1950	4,732,929	17,346	10,816	6,530	8,577	164,776
1951	5,796,062	19,681	13,069	6,612	9,410	164,732
1952	6,522,279	22,910	11,711	11,199	10,227	171,610
1953	5,729,954	24,590	15,589	9,001	12,187	178,639
1954	5,111,356	24,570	20,353	4,217	13,161	234,294
1955	6,143,731	23,557	24,807	(1,250)	17,198	241,530
1956	5,246,346	23,837	23,379	458	15,269	248,040
1957	4,969,280	20,777	19,977	800	15,110	159,663
1958	4,032,743	20,770	22,878	(2,108)	14,870	500,471
1959	4,690,128	25,976	18,610	7,366	12,546	518,982
1960	4,711,523	26,145	19,944	6,201	13,569	518,512

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

building was replaced, fixed assets were over three times the previous value.

Thirty Florida vegetable items have been reported handled through the Sanford market since it began operation (Table 62). This is the largest number of items reported by any market. Nine items have not been reported each year. Therefore, the Sanford market consistently has had the largest variety of items available. In addition to citrus of all kinds, a large assortment of items produced out of the state make this market an excellent location for loading trucks with a wide variety of produce. Cantaloupe has been reported for less than 13 years. Cabbage, celery, and citrus have been the largest-volume items handled.

Wauchula.--The state vegetable market at Wauchula was the second market opened. It was in operation for the 1936-37 season and it has operated continuously for 24 years. This market was also located in an area of small-acreage growers with a limited variety of potential crops. The market operates a split spring and fall season and is open about 20 weeks each year.

Sales increased from \$120,117 in 1937, to \$1,618,971 in 1948, after which they began to decline (Table 63). Sales were \$725,774 in 1960. Florida vegetables are the only items

TABLE 62.--Sanford State Farmers' Market for vegetables: Annual sales volume, by items, 1939-60

Item	Unit	Season			
		1939	1940	1941	1942
Beans, Lima and butter	Bushel	2,379	837	210	437
Beans, pole	Bushel	.	.	.	.
Beans, snap	Bushel	68,004	33,290	56,093	69,798
Beets	Dozen bunches	18,580	19,133	19,477	12,728
Broccoli	50 Pounds	139	210	240	240
Cabbage	50 Pounds	92,422	192,482	71,209	142,927
Cabbage, Chinese	50 Pounds	543	660	1,701	1,094
Cantaloupe	40 Melons	142	542	63	25
Carrots	Dozen bunches	9,640	14,874	8,291	11,978
Cauliflower	Crates	6,181	6,798	15,380	16,293
Celery	Crates	71,140	94,363	80,417	106,834
Corn, sweet and green	Crates	1,968	994	4,675	2,880
Cucumbers	Bushel	2,611	3,562	4,295	3,346
Eggplant	Bushel	4,275	1,535	3,126	4,025
Escarole	Bushel	1,473	262	1,016	261
Greens	Dozen bunches	19,434	13,225	10,501	19,755
Lettuce	Crates	14,613	20,182	18,863	35,433
Okra	Bushel	190	141	782	81
Onions	Dozen bunches	1,772	4,917	3,132	3,883
Peas, green	Bushel	3,224	3,413	2,086	3,545
Peas, southern	Bushel	886	370	1,525	547
Peppers	Bushel	10,707	5,594	6,860	10,316
Potatoes, Irish	50 Pounds	18,411	26,126	22,905	36,175
Potatoes, sweet	Bushel	31,103	1,624	4,915	365
Radishes	Dozen bunches	1,824	1,479	2,265	1,094
Spinach	Bushel	1,717	1,084	234	695
Squash	Bushel	4,510	4,783	3,076	7,211
Strawberries	24 Pints	3,077	3,003	1,469	1,088
Tomatoes	60 Pounds	28,153	16,221	23,633	48,307
Watermelons	10 Melons	91	49	103	40
Citrus	Boxes	86,568	72,218	96,050	93,484

Source: Florida, State Agricultural Marketing Board, Annual Reports.

TABLE 62.--Extension

Ending						
1943	1944	1945	1946	1947	1948	1949
590	306	769	2,324	576	2,649	2,618
124	132	. .	. .	1,010	870	4,080
81,861	41,146	39,482	77,555	156,341	230,481	250,971
24,590	21,902	15,887	11,903	6,945	2,583	834
372	768	215	132	80	1,057	1,940
85,260	341,953	248,848	267,850	366,977	552,396	516,213
400	1,439	364	193	311	411	540
. .	. .	190	. .	19	. .	. .
20,697	11,322	2,399	3,084	1,565	2,644	2,822
17,297	20,322	12,822	12,334	11,058	8,451	18,067
94,167	92,216	64,969	83,314	91,890	130,752	215,872
5,170	2,117	6,646	11,074	2,156	11,753	46,492
3,334	909	6,597	10,363	7,680	19,456	27,571
1,936	2,540	3,424	4,025	2,979	4,672	12,169
963	10,219	20,516	15,586	7,935	16,027	3,699
17,703	31,417	11,649	18,732	9,657	150,170	4,333
21,723	17,573	11,775	29,836	23,185	13,318	21,580
110	29	32	64	408	441	707
3,533	7,031	8,740	8,166	4,046	2,598	1,356
2,961	7,160	11,274	8,722	3,182	2,132	2,826
1,022	441	455	1,871	380	6,459	10,609
8,514	13,989	12,785	27,162	11,515	23,256	37,167
27,634	43,921	43,223	43,272	10,432	36,931	61,364
1,122	14,478	384	240	412	738	1,283
598	1,212	662	1,586	639	1,198	4,617
264	1,421	733	67	9	135	1,449
7,430	4,005	7,821	12,112	8,836	18,391	26,379
555	6	12	549	156	318	14
26,359	27,332	31,016	23,840	14,080	20,601	45,438
20	537	340	103	. .	684	1,721
121,164	226,175	239,424	259,591	255,341	230,267	287,455

TABLE 62.--Continued

Item	Unit	Season			
		1950	1951	1952	1953
Beans, Lima and butter	Bushel	1,716	1,588	1,455	913
Beans, pole	Bushel	9,824	9,475	14,121	10,988
Beans, snap	Bushel	316,168	135,842	189,054	148,296
Beets	Dozen bunches	2,862	6,391	2,077	903
Broccoli	50 Pounds	270	1,917	121	..
Cabbage	50 Pounds	745,127	809,574	1,012,013	926,015
Cabbage, Chinese	50 Pounds	755	1,470	2,336	2,893
Cantaloupe	40 Melons	250	..	..	..
Carrots	Dozen bunches	962	1,026	620	50
Cauliflower	Crates	21,701	32,983	34,478	40,486
Celery	Crates	267,107	256,499	251,311	254,595
Corn, sweet and green	Crates	68,731	127,795	222,500	216,928
Cucumbers	Bushel	26,438	19,878	26,349	31,577
Eggplant	Bushel	8,844	6,893	11,645	13,023
Escarole	Bushel	17,097	32,190	32,737	55,499
Greens	Dozen bunches	8,331	56,432	73,352	7,559
Lettuce	Crates	44,343	31,805	30,521	37,411
Okra	Bushel	1,063	108	1,073	442
Onions	Dozen bunches	3,310	7,395	11,728	13,985
Peas, green	Bushel	2,742	6,209	3,243	5,036
Peas, southern	Bushel	4,254	2,182	2,746	2,008
Peppers	Bushel	45,783	25,576	67,662	103,475
Potatoes, Irish	50 Pounds	97,876	118,477	110,693	223,760
Potatoes, sweet	Bushel	544	26	46	501
Radishes	Dozen bunches	4,395	14,271	15,989	21,730
Spinach	Bushel	5,675	4,614	2,097	1,938
Squash	Bushel	25,079	17,891	14,668	19,493
Strawberries	24 Pints	1,045	24	..	..
Tomatoes	60 Pounds	31,188	12,321	15,471	7,958
Watermelons	10 Melons	996	927	1,102	2,348
Citrus	Boxes	338,409	458,852	465,366	804,216

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 62.--Extension

Ending						
1954	1955	1956	1957	1958	1959	1960
828	447	879	451	263	316	108
13,576	30,950	15,291	20,563	22,534	21,457	37,200
206,913	141,974	91,093	63,625	74,996	68,688	60,400
748	437	691	150	. .	. .	. .
193	501	. .	35	. .	. .	103
721,819	756,412	678,414	526,964	462,386	485,122	623,697
3,363	2,991	2,994	1,326	1,237	2,316	6,045
.
100	784	. .	28	. .	. .	. .
42,113	48,953	86,824	42,436	4,954	3,311	6,458
212,241	232,262	195,976	156,170	127,520	161,895	138,710
196,432	219,690	168,344	99,545	96,195	163,863	108,651
49,813	49,164	35,573	36,673	25,777	28,571	35,510
13,887	10,362	6,729	9,324	3,942	12,996	12,236
40,430	43,882	20,112	19,770	14,246	49,531	102,588
16,795	27,608	7,175	3,975	7,251	3,814	8,656
33,268	53,401	66,562	44,204	22,437	24,340	18,900
942	861	683	533	271	780	427
20,538	22,121	21,038	10,052	18,371	29,226	26,687
2,606	3,329	1,883	931	385	505	884
1,204	618	894	804	995	833	438
93,316	82,013	46,718	68,158	23,078	45,574	52,083
151,696	139,063	165,040	95,050	63,513	57,663	60,652
25	1,166	298	. .	. .	. .	. .
49,789	39,601	29,948	28,244	22,790	83,783	37,325
25	534	32,308	. .	. .	. .	. .
20,567	18,219	26,244	14,512	23,470	11,563	15,961
.
14,593	15,101	8,350	8,350	2,827	10,215	2,373
1,289	1,565	1,770	929	1,609	1,776	4,459
549,872	570,346	538,062	529,265	428,190	415,511	346,998

TABLE 63.--Wauchula State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1937-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1937	120,117	2,001	1,333	668	807	21,397
1938	215,337	4,184	3,940	244	3,192	20,293
1939	281,720	3,596	3,237	359	2,632	28,666
1940	422,536	4,745	3,843	902	3,018	44,325
1941	454,802	5,372	4,880	492	3,301	37,923
1942	618,144	8,840	5,137	3,703	4,763	47,982
1943	636,446	5,367	4,404	963	3,929	47,871
1944	699,509	7,264	5,099	2,165	4,526	51,061
1945	608,763	6,008	5,136	872	4,513	51,123
1946	1,391,068	13,135	7,098	6,037	6,025	53,363
1947	1,010,682	10,003	8,052	1,951	6,546	71,673
1948	1,618,971	16,029	8,120	7,909	7,075	78,130
1949	1,240,057	14,330	10,110	4,220	7,991	78,700
1950	1,043,716	13,438	10,343	3,095	8,403	97,979
1951	505,454	8,337	10,718	(2,381)	7,546	114,630
1952	1,186,553	13,316	11,577	1,739	9,843	118,205
1953	984,866	14,807	14,628	179	10,529	124,701
1954	564,284	13,559	17,042	(3,483)	11,108	193,741
1955	1,269,326	19,479	15,255	4,224	9,924	212,847
1956	792,332	15,505	19,834	(4,329)	11,986	222,579
1957	588,599	12,224	16,467	(4,243)	10,114	223,919
1958	473,199	13,379	13,046	333	7,516	242,333
1959	919,245	11,421	11,647	(226)	6,776	251,342
1960	725,774	12,937	11,129	1,808	5,354	253,482

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

handled. Annual income was \$2,001 in 1937. It reached a high in 1955 of \$19,479 and, in 1960, market income was \$12,937. For 19 of 24 years, income was sufficient to cover operating expenses. Profits ranged from \$179 to \$7,909; operational losses ranged from \$226 to \$4,329. Personnel expenses moved generally upward from \$807 in 1937 to a high point of \$11,986 in 1956. In 1960, they were \$5,354. Fixed assets were \$21,397 in 1937. They tended upward, until 1960, when they were \$253,482.

Seventeen vegetable items have been handled (Table 64). Cucumbers, eggplants, peppers, squash, and tomatoes have been handled each year. Snap beans, okra, and southern peas have been reported from 17 to 20 years. Five items have been reported seven years or less. Cucumbers, peppers, and tomatoes have been the largest-volume items, but peppers have been declining rapidly in recent years.

Area 2 summary.—The vegetable markets in Area 2, as a group, have had sales adequate to produce an income in excess of operating expenses for all except two years. In recent years, sales amounted to nearly seven times the value of fixed assets (Table 65). Maximum sales of \$17,261,000 at state vegetable markets in Area 2 were reached in 1952. Since 1952, sales have declined; and, in 1960, they were \$13,975,000.

TABLE 64.--Wauchula State Farmers' Market for vegetables:
Annual sales volume, by items, 1939-60

Item	Unit	Season			
		1939	1940	1941	1942
Beans, Lima	Bushel	2,447	1,245	438	52
Beans, pole	Bushel	..	..	..	85
Beans, snap	Bushel	1,334	7,425	3,644	4,721
Cabbage	50 Pounds	..	..	..	2
Cantaloupe	40 Melons	..	..	25	..
Corn, sweet	Crates	2,496	2,193	1,036	3,147
Cucumbers	Bushel	85,340	163,467	126,689	125,679
Eggplant	Bushel	17,360	8,785	13,920	29,520
Okra	Bushel	58	55	17	11
Peas, green	Bushel	369	336	28	59
Peas, southern	Bushel	1,312	894	540	138
Peppers	Bushel	69,312	58,612	25,793	85,212
Potatoes, Irish	50 Pounds	389	723	1,431	1,872
Squash	Bushel	4,205	5,813	3,332	4,584
Strawberries	24 Pints	149	..	487	17
Tomatoes	60 Pounds	55,684	60,624	141,937	120,776
Watermelons	10 Melons	53	100	39	1

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 64.--Extension

Ending						
1943	1944	1945	1946	1947	1948	1949
273	27	80	25	. .	. .	. .
.
8,251	1,528	1,975	503	155	3,595	394
.
. .	. .	. .	. .	62	. .	. .
668	234	70	41	8	. .	. .
51,052	63,882	47,355	152,717	133,207	228,561	179,032
9,282	13,813	9,320	12,479	13,470	7,115	12,854
36	54	21	157	372	62	203
20	107	77	. .	. .	47	. .
361	353	117	255	583	305	1,292
88,039	48,920	23,642	38,083	37,451	16,856	25,045
1,098	345	98	23	24	. .	33
7,652	5,222	4,708	4,784	1,630	4,637	2,304
.
83,225	50,129	55,563	82,500	55,960	130,878	121,617
1	5	1	. .	. .	. .	. .

TABLE 64.--Continued

Item	Unit	Season			
		1950	1951	1952	1953
Beans, Lima	Bushel	..	..	..	1
Beans, pole	Bushel	..	..	89	18
Beans, snap	Bushel	219	172	497	53
Cabbage	50 Pounds	..	..	..	..
Cantaloupe	40 Melons	..	..	..	..
Corn, sweet	Crates	..	..	..	..
Cucumbers	Bushel	209,486	171,637	265,015	270,555
Eggplant	Bushel	8,135	2,047	13,003	8,705
Okra	Bushel	44	12	21	52
Peas, green	Bushel	..	..	..	..
Peas, southern	Bushel	590	82	185	103
Peppers	Bushel	15,813	5,503	12,701	10,404
Potatoes, Irish	50 Pounds	44	..	..	..
Squash	Bushel	4,192	1,060	1,517	576
Strawberries	24 Pints	..	..	..	..
Tomatoes	60 Pounds	61,255	20,895	27,315	46,354
Watermelons	10 Melons	..	..	..	..

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 64.--Extension

Ending						
1954	1955	1956	1957	1958	1959	1960
117	..	..	..	..	..	..
1	..	..	..	..	..	..
..	13	..	..	24	..	..
..
..
..
215,858	429,438	331,940	235,819	236,337	218,731	298,720
6,769	10,589	3,788	1,928	2,080	799	887
22	2	..	10	..	..	..
..
18	102	12	28	5	..	..
9,635	25,434	11,983	2,690	7,891	4,709	455
..	14	..	..	..	..	..
487	483	601	56	62	58	3,417
..
33,981	33,291	22,700	16,211	28,081	32,836	15,625
..

TABLE 65.--All Florida state vegetable markets in Area 2: Annual major operating figures and fixed assets valuation of seven state vegetable markets, 1935-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(\$1,000)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1935	519	3,091	2,345	746	1,568	57,614
1936	750	4,962	4,634	328	3,079	57,750
1937	613	6,188	5,942	246	3,757	88,999
1938	826	14,132	14,396	(264)	10,371	160,762
1939	3,273	22,814	20,618	2,196	14,981	446,422
1940	3,463	30,620	29,314	1,306	17,541	489,748
1941	3,464	31,327	29,769	1,558	20,427	428,877
1942	4,151	50,074	36,663	13,411	26,762	475,297
1943	4,807	41,592	31,988	9,604	21,317	474,897
1944	5,777	59,952	42,555	17,397	29,675	492,223
1945	5,631	52,333	40,928	11,405	29,529	509,266
1946	9,133	73,169	47,295	25,874	35,196	508,526
1947	9,353	73,407	49,317	24,090	38,666	702,632
1948	11,870	100,267	58,627	41,640	43,150	761,098
1949	13,995	111,828	71,275	40,553	47,535	863,608
1950	13,602	123,955	87,551	36,404	50,769	861,807
1951	14,755	118,577	84,582	33,995	56,386	1,017,294
1952	17,261	135,947	90,695	45,252	63,368	1,115,674
1953	13,914	138,674	112,898	25,776	68,182	1,136,915
1954	12,216	144,182	137,084	7,098	66,022	1,544,787
1955	16,282	164,800	162,526	2,274	74,490	1,645,738
1956	13,344	158,623	152,131	6,492	75,819	1,699,347
1957	12,743	139,765	139,875	(110)	73,481	1,674,712
1958	10,172	132,191	114,290	17,901	70,552	2,108,601
1959	14,058	140,614	113,308	27,306	71,533	2,074,108
1960	13,975	142,386	108,124	34,262	68,926	2,118,216
Total	..	..	..	426,740	..	..
Average	..	..	..	16,413	..	..

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

Income for this area's state vegetable markets, as a group, was adequate to cover expenses in all but 2 of 26 years. Maximum income of \$164,800 was reported in 1955. It was \$142,386 in 1960. Maximum profits were \$45,252 in 1952, the same year of maximum sales. Total profits for 26 years of operation were \$426,740. Average annual profit was \$16,413.

Personnel expenses of the seven state vegetable markets in Area 2 were highest in 1956, at \$75,819. Thereafter, personnel expenses declined slightly and, in 1960, were \$68,926. Fixed assets of these markets continually increased and, in 1960, were \$2,118,216.

Area 3

Area 3 has five state vegetable markets. They were built over a span of 12 years, from 1940 to 1952, and all are still operating.

Florida City.—The Florida City state vegetable market was opened in 1940 and has operated for 21 years. This market was located in an area where vegetable production was somewhat limited in variety but was intensive for a few items. The size of vegetable farms in this area was larger than average for the state. The market usually operates about 20 weeks per year.

Sales were \$120,714 in 1940 (Table 66). Sales reached their high point in 1951 when they were \$4,326,721. In 1960, sales were \$3,307,928. Annual income has generally increased throughout the operational history, with few fluctuations. It was \$586 in 1940, and was at its highest at \$65,845 in 1957. Income was \$34,775 in 1960. Market income has adequately covered operating expenses in all but two years. Profits have ranged from \$86 to \$33,851, with nine years in excess of \$10,000; five years in excess of \$20,000, and two years exceeding \$30,000. Contributions to the General Inspection Fund from the market at Florida City have been substantial. Losses in the two years reported were \$80 and \$538, respectively. Personnel expenses increased gradually from \$271 in 1940, to \$20,890 in 1956. Since 1956, personnel expenses have declined and were \$14,684 in 1960. Fixed assets at the Florida City market have shown an increase from \$49,506 in 1940 to \$590,911 in 1960.

Twenty vegetable items have been handled for at least one year (Table 67). Only one of these -- tomatoes -- has been handled each year, while four were handled for only one year. Squash and cucumbers have been reported for 20 and 19 years, respectively. At least one kind of beans has been handled every year. Snap beans held the dominant position

TABLE 66.--Florida City State Farmers' Market for vegetables:
Annual sales, major operational figures, and fixed assets valuation,
1940-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1940	120,714	586	500	86	271	49,506
1941	263,543	1,138	1,218	(80)	1,077	39,089
1942	123,652	2,005	2,543	(538)	2,119	39,149
1943	302,201	5,234	3,434	1,810	2,619	39,178
1944	429,557	9,089	5,060	4,029	3,780	38,428
1945	866,426	15,235	8,905	6,330	5,543	39,362
1946	2,074,890	21,070	9,108	11,962	5,311	66,706
1947	1,208,649	13,552	8,574	4,978	6,246	79,286
1948	1,367,240	12,692	9,929	2,763	6,192	118,189
1949	3,594,077	37,243	12,194	25,049	8,736	118,874
1950	2,773,429	64,908	34,155	30,753	11,221	111,705
1951	4,326,721	43,780	22,768	21,012	14,839	132,726
1952	3,480,034	42,025	23,340	18,685	16,523	139,098
1953	2,176,541	34,080	30,461	3,619	16,320	240,378
1954	2,338,836	52,611	43,530	9,081	17,534	317,904
1955	3,102,710	51,660	37,559	14,101	20,462	345,892
1956	2,601,657	52,705	38,981	13,724	20,890	420,062
1957	4,039,700	65,845	31,994	33,851	16,862	506,744
1958	2,771,976	39,794	30,444	9,350	15,803	547,483
1959	3,566,012	56,165	31,153	25,012	16,264	589,782
1960	3,307,928	34,775	27,560	7,215	14,684	590,911

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

^aLoss shown in parentheses ().

TABLE 67.--Florida City State Farmers' Market for vegetables:
Annual sales volume, by items, 1940-60

Item	Unit	Season		
		1940	1941	1942
Beans, Lima	Bushel	232	..	..
Beans, pole	Bushel	..	837	..
Beans, snap	Bushel	18,650	39,523	1,948
Cabbage	50 Pounds	..	..	480
Cabbage, Chinese	50 Pounds	..	645	..
Cantaloupe	40 Melons	..	..	..
Carrots	Dozen bunches	..	..	..
Cauliflower	Crates	..	..	..
Corn, sweet	Crates	8	..	..
Cucumbers	Bushel	311	..	..
Eggplant	Bushel	104	..	..
Lettuce	Crates	..	..	..
Okra	Bushel	..	133	..
Peas, green	Bushel	309	70	20
Peas, southern	Bushel	..	..	..
Peppers	Bushel	352	456	122
Potatoes, Irish	50 Pounds	707	965	45
Potatoes, sweet	Bushel	..	..	24
Squash	Bushel	5,139	5,130	480
Tomatoes	60 Pounds	27,536	61,263	52,238

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 67.--Extension

Ending						
1943	1944	1945	1946	1947	1948	1949
26	. .	. .	313	. .	146	364
. .	. .	278	. .	. .	. .	10,099
1,162	4,751	12,415	36,024	18,195	25,314	20,456
. .	47	. .	3	. .	361	. .
.
.
. .	. .	. .	. .	406	. .	. .
. .	. .	30	. .	. .	. .	. .
. .	. .	. .	. .	. .	11	. .
19	98	129	685	1,928	177	315
131	. .	70	103	327	. .	727
12	. .	. .	. .	. .	. .	. .
73	. .	. .	4	43	12	. .
317	862	81	73	257	23	. .
.
724	833	353	390	406	333	1,577
. .	23,000	. .	732	. .	. .	. .
.
3,550	9,084	13,145	17,732	11,102	10,082	15,206
60,236	130,875	243,237	325,172	189,847	188,487	632,611

TABLE 67.--Continued

Item	Unit	Season			
		1950	1951	1952	1953
Beans, Lima	Bushel	375	290	..	..
Beans, pole	Bushel	15,602	16,509	11,779	6,274
Beans, snap	Bushel	4,648	18,557	8,547	106
Cabbage	50 Pounds	..	..	..	..
Cabbage, Chinese	50 Pounds	..	..	..	..
Cantaloupe	40 Melons	..	..	..	..
Carrots	Dozen bunches	..	..	..	..
Cauliflower	Crates	..	..	..	..
Corn, sweet	Crates	..	..	..	..
Cucumbers	Bushel	334	137	119	254
Eggplant	Bushel	368	27	309	..
Lettuce	Crates	..	..	..	..
Okra	Bushel	3	..	56	..
Peas, green	Bushel	..	54	366	..
Peas, southern	Bushel	..	..	..	..
Peppers	Bushel	978	141	..	32
Potatoes, Irish	50 Pounds	84	..	..	..
Potatoes, sweet	Bushel	..	..	..	..
Squash	Bushel	12,459	12,761	12,573	7,371
Tomatoes	60 Pounds	888,730	735,994	769,066	433,046

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 67.--Extension

Ending						
1954	1955	1956	1957	1958	1959	1960
1,347	434	9,291	12,158	3,342	1,739	14,126
. .	. .	. .	. .	10,426	3,622	1,369
.
.
. .	. .	4,100	. .	1,820	. .	8,541
.
.
.
3,473	4,636	37,388	22,954	32,389	18,699	23,568
.
.
. .	. .	. .	. .	265	. .	1,320
.
. .	. .	. .	145	. .	. .	1,677
. .	71	. .	16	. .	. .	. .
854	. .	. .	23,707	. .	. .	. .
.
6,116	3,110	. . . .	14,476	10,770	4,360	24,857
609,695	750,099	657,323	903,912	462,242	913,985	517,787

during the early years; and pole beans for the later years. Lima beans have been reported occasionally, but never in large amounts. Peppers have been handled for 15 years. Beans, squash, and tomatoes have been the principal items of volume. Cucumbers have been handled in volume during the last five years.

Fort Myers.--The Fort Myers state vegetable market was opened for the 1945-46 season. It was located in an area where sizes of vegetable farms were above average for the state, but below average for Area 3. The market has been operating about 22 weeks per year.

Sales had a relatively modest beginning of \$64,179 in 1946, but increased throughout the operational period. In 1960, sales were \$3,965,997 (Table 68). Annual income increased from \$1,428 in 1940, to \$31,376 in 1959. In 1960, income was \$30,847. Although market income increased steadily, it was frequently inadequate to cover market operating expenses. Operational losses were reported for seven years. They ranged from \$689 to \$4,424. Operational profits were reported eight years and ranged between \$1,460 and \$14,438. Personnel expenses have ranged from \$1,810 to \$15,795. Fixed assets have increased annually. They were \$70,264 in 1946, and \$468,717 in 1960. Team-track loading facilities, provided

TABLE 68. Fort Myers State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1946-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1946	64,179	1,428	5,852	(4,424)	3,789	70,264
1947	873,650	1,954	4,889	(2,935)	3,981	113,016
1948	800,012	1,567	4,368	(2,801)	2,870	113,529
1949	747,415	2,991	3,680	(689)	1,810	114,436
1950	792,068	4,381	5,859	(1,478)	2,071	115,670
1951	958,079	2,691	5,132	(2,441)	3,524	115,934
1952	1,970,631	9,067	7,607	1,460	4,051	131,921
1953	2,592,804	12,331	8,674	3,657	5,397	156,929
1954	2,521,423	19,528	14,515	5,013	7,170	233,837
1955	3,185,349	30,871	16,433	14,438	8,582	272,704
1956	3,381,776	27,280	18,162	9,118	9,352	307,746
1957	3,532,788	26,918	19,237	7,681	10,271	319,886
1958	2,271,359	26,592	27,527	(935)	14,941	409,839
1959	3,910,733	31,376	26,700	4,676	15,795	432,178
1960	3,965,997	30,847	23,844	7,003	12,809	468,717

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

for the 1952-53 season, enabled the market to diversify the products handled. Sales, income, and operational gains have all shown marked improvement since the team track has been in operation.

Fifteen vegetable items have been reported by the Fort Myers market for one or more years (Table 69). Four items have been reported each year; and four items, three years or less. Cucumbers, peppers, squash, and tomatoes have been the most dependable items; but cucumbers, peppers, and Irish potatoes have been the largest-volume items. Gladioli have been reported for the last 12 years.

Immokalee.--The Immokalee state vegetable market is one of the newer State Farmers' Markets. It has been in operation only since the 1951-52 season. This market was located in an area where size of vegetable farms was near the state average. It operates about 22 weeks per year.

Sales at Immokalee in 1952 were \$432,982, and they reached \$2,001,285 by 1956. In 1960, they had declined to \$1,052,843 (Table 70). Income for the nine years of operation has ranged between \$5,391 and \$25,166. For seven years, income was sufficient to cover operating expenses and show a profit ranging from \$956 to \$9,347. Personnel expenses

TABLE 69.--Fort Myers State Farmers' Market for vegetables:
Annual sales volume, by items, 1946-60

Item	Unit	Season			
		1946	1947	1948	1949
Beans, snap	Bushel	. .	. .	. .	. .
Cabbage	50 Pounds	. .	. .	. .	. .
Cantaloupes	40 Melons	. .	. .	. .	. .
Corn, sweet	Crate	. .	. .	. .	. .
Cucumbers	Bushel	5,063	7,258	6,148	15,089
Eggplant	Bushel	790	3,411	3,490	. .
Okra	Bushel	. .	4	. .	. .
Peas, green	Bushel	. .	. .	. .	. .
Peas, southern	Bushel	. .	. .	. .	. .
Peppers	Bushel	5,635	9,507	21,148	3,148
Potatoes, Irish	50 Pounds	. .	. .	. .	. .
Potatoes, sweet	Bushel	. .	. .	. .	. .
Squash	Bushel	168	238	621	1,368
Tomatoes	60 Pounds	8,979	913	1,243	. .
Watermelons	10 Melons	. .	. .	. .	. .

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 69.--Extension

Ending						
1950	1951	1952	1953	1954	1955	1956
28	1	..	208	25	..	..
..	..	..	9,120	..	..	..
..
..	..	1,323	8,145	..	..	9,520
2,244	14,812	117,197	140,484	322,903	545,681	365,833
9,424	9,052	61,025	40,182	43,224	35,789	21,251
22	114	13	103	..	309	..
..	5	..	..	11	..	..
..	..	..	1,182	43	..	..
22,363	9,778	95,065	86,733	120,221	201,692	159,551
..	..	..	308,139	108,500	179,800	141,485
119	1 ..	14,893	35,319	6,880	1,643	162
1,460	652	12,212	23,746	9,439	34,811	20,869
3,833	2,076	1,436	14,104	1,214	344	111,277
..	..	..	13,375	7,480	21,526	41,267

TABLE 69.--Continued

Item	Unit	Season Ending			
		1957	1958	1959	1960
Beans, snap	Bushel	197	..	..	..
Cabbage	50 Pounds	..	4,800	..	21,394
Cantaloupes	40 Melons	..	1,821	..	..
Corn, sweet	Crate	10,123	3,740	1,310	7,899
Cucumbers	Bushel	316,520	283,450	385,635	301,676
Eggplant	Bushel	32,133	9,145	13,712	2,460
Okra	Bushel	..	..	..	..
Peas, green	Bushel	..	..	..	..
Peas, southern	Bushel	..	..	..	..
Peppers	Bushel	224,957	101,781	253,554	230,551
Potatoes, Irish	50 Pounds	82,010	21,335	126,935	37,193
Potatoes, sweet	Bushel	..	..	6,857	3,134
Squash	Bushel	51,665	31,298	81,042	85,093
Tomatoes	60 Pounds	70,306	22,944	41,527	70,374
Watermelons	10 Melons	12,264	9,968	481	10,575

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 70.--Immokalee State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1952-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1952	432,982	5,391	9,758	(4,367)	4,671	103,192
1953	686,446	12,610	11,251	1,359	7,485	118,592
1954	544,109	12,223	13,348	(1,125)	7,884	152,299
1955	1,239,485	18,303	11,968	6,335	6,813	176,539
1956	2,001,285	25,166	15,819	9,347	8,873	192,441
1957	1,672,173	25,063	17,696	7,367	9,300	247,276
1958	1,140,081	18,301	17,345	956	9,241	311,661
1959	1,398,243	21,071	17,060	4,011	9,485	317,950
1960	1,052,843	20,184	17,319	2,865	10,425	320,639

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

increased from \$4,671 to \$10,425. Fixed assets increased annually from \$103,192 to \$320,639.

Sixteen vegetable items have been handled one or more years (Table 71). Seven of these items -- cucumbers, eggplant, okra, southern peas, peppers, squash, and tomatoes -- have been handled each year. Cantaloupe and watermelons have been handled in all but one year. The other items have been reported from three to five years.

Pahokee.--The Pahokee state vegetable market was opened for the 1941-42 season, and has operated continuously. This market was located in an area where the average size of vegetable farms was the largest in the state. The active operating season is about 30 weeks per year.

Sales at the Pahokee market have shown a general increase throughout the years, and are still increasing. Sales were \$93,027 in 1942, and \$4,136,823 in 1960 (Table 72). All sales are by handlers to whom the market leases space. Annual income has shown a steady increase from \$339 in 1942 to \$13,900 in 1960. However, income has not been maintained at a level consistent with the volume of business. Neither has income been adequate to cover operating expenses with regularity. Only 6 years out of 19 have shown a profit. Profits have been relatively small compared to sales volume,

TABLE 71.--Immokalee State Farmers' Market for vegetables:
Annual sales volume, by items, 1952-60

Item	Unit	Season		
		1952	1953	1954
Beans, pole	Bushel	1	. .	263
Beans, snap	Bushel	23	131	285
Cabbage	50 Pounds	19	. .	80
Cantaloupes	40 Melons	5,132	1,477	417
Corn, sweet	Crate	. .	540	9,588
Cucumbers	Bushel	35,039	74,777	39,209
Eggplant	Bushel	2,309	2,402	273
Okra	Bushel	291	51	100
Peas, green	Bushel	. .	. .	2
Peas, southern	Bushel	2,413	1,931	2,406
Peppers	Bushel	1,630	3,955	4,799
Potatoes, Irish	50 Pounds	. .	. .	. .
Potatoes, sweet	Bushel	. .	. .	1
Squash	Bushel	19,518	21,913	33,821
Tomatoes	60 Pounds	20,519	64,603	45,367
Watermelons	10 Melons	11,950	6,738	9,126

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 71.--Extension

Ending					
1955	1956	1957	1958	1959	1960
15	..	..	3	..	..
6	..	2	..	..	..
..	..	..	2,012	..	..
1,647	6,647	..	335	527	2,223
..	..	314	..	..	..
92,190	154,876	167,808	101,784	111,676	61,644
3,967	4,894	294	2,636	115	279
517	248	3,363	584	1,601	290
..
2,258	4,801	3,699	190	272	331
14,367	37,718	28,965	11,513	7,428	2,577
8	119,388	359,414	6,348	..	..
4	..	..	..	..	..
34,441	36,380	37,171	8,455	5,788	4,285
126,348	170,754	33,800	63,382	146,321	81,949
529	6,130	3,358	8,090	..	4,008

TABLE 72.--Pahokee State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1942-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1942	93,027	339	339	.	263	77,129
1943	1,779,365	3,789	6,205	(2,416)	3,827	78,543
1944	2,114,709	4,996	6,140	(1,144)	4,200	79,171
1945	2,315,613	5,885	6,351	(466)	4,426	89,206
1946	2,822,152	7,526	8,169	(643)	5,444	91,333
1947	2,163,898	5,831	6,970	(1,139)	5,146	90,763
1948	794,156	2,525	6,325	(3,800)	3,145	119,030
1949	1,658,192	3,441	5,863	(2,422)	3,560	118,239
1950	2,063,990	4,981	8,385	(3,404)	3,519	118,269
1951	2,139,004	5,367	5,227	140	3,455	118,270
1952	2,784,322	6,167	4,439	1,728	3,656	120,597
1953	2,209,400	8,437	7,492	945	4,497	123,688
1954	2,250,950	9,119	9,662	(543)	5,150	156,412
1955	1,937,890	9,278	9,595	(317)	5,182	159,611
1956	2,708,200	10,601	10,545	56	5,983	165,229
1957	2,986,464	11,003	11,332	(329)	6,581	186,489
1958	3,051,789	11,881	10,886	995	6,729	186,780
1959	3,128,335	11,804	14,141	(2,337)	7,753	179,015
1960	4,136,823	13,900	11,909	1,991	7,329	179,051

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

ranging from \$56 to \$1,991. The first year of operation showed market income and operating expenses as being equal. Twelve years have shown losses that ranged from \$317 to \$3,800. Personnel expenses have been reported at modest levels, also. They increased from \$263 in 1942 to \$7,753 in 1959. In 1960 they were \$7,329. Fixed assets have increased steadily throughout the period. They were \$77,129 in the opening year, and \$186,780 in 1958. In 1960, fixed assets were \$179,051.

Twenty-one vegetable items have been reported handled for at least one year (Table 73). No single item was handled every year. Celery was handled in all but one year. Potatoes were not included in the reports for two years. Cabbage and sweet corn were reported for 16 years. The other items were handled occasionally, with 12 items being reported for five years or less. Celery and sweet corn have been the volume items.

Pompano.--The Pompano state vegetable market was opened in the 1939-40 season and has operated each year. It is located in an area which has vegetable farms considerably larger than average. There was a sizeable acreage of vegetables grown in this area before the market was built, but production has expanded considerably since that time. The market usually operates about 30 weeks each year.

TABLE 73.--Pahokee State Farmers' Market for vegetables:
Annual sales volume, by items, 1942-60

Item	Unit	Season		
		1942	1943	1944
Beans, Lima	Bushel	..	..	5,420
Beans, pole	Bushel	..	..	..
Beans, snap	Bushel	..	206,079	352,985
Cabbage	50 Pounds	14,640	36,317	28,000
Carrots	Dozen bunches	..	70	..
Celery	Crates	60,423	261,320	349,887
Corn, sweet	Crates	..	..	17,997
Cucumbers	Bushel	..	29	475
Eggplant	Bushel	..	899	5,394
Endive and escarole	Bushel	..	..	..
Greens	Dozen bunches	..	..	..
Lettuce	Crates	..	1,000	..
Okra	Bushel	..	106	..
Onions	Dozen bunches	..	..	..
Peas, green	Bushel	..	7,163	4,360
Peas, southern	Bushel	..	12	..
Peppers	Bushel	..	2,152	5,205
Potatoes, Irish	50 Pounds	..	45,000	18,200
Radishes	Dozen bunches	..	..	..
Squash	Bushel	..	4,077	1,964
Tomatoes	60 Pounds	500	696	100

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 73.--Extension

Ending						
1945	1946	1947	1948	1949	1950	1951
7,713	8,382	6,839	..	..	..	..
..
287,984	356,388	247,206	..	..	32,493	..
5,765	13,788	8,000	30,000	27,371	7,000	23,328
..
379,000	563,000	337,515	298,629	326,985	339,593	366,348
..	4,600	2,340	30,000	191,750	459,851	443,941
123	1,238	225	..	..	..	..
12,437	12,483	15,011	5,415	..	..	..
..	..	..	5,000	19,941	20,000	9,802
..
..	3,000	2,000	..	..	..	369
..	..	320	..	..	..	..
..
10,793	1,280	..	..	..	..	..
..
12,322	22,079	17,026	5,000	..	..	..
17,192	102,538	4,771	24,000	65,190	75,000	51,461
..
7,230	8,749	8,014	..	..	..	..
608	..	..	..	..	..	..

TABLE 73.--Continued

Item	Unit	Season		
		1952	1953	1954
Beans, Lima	Bushel	. .	. .	. .
Beans, pole	Bushel	. .	. .	1,276
Beans, snap	Bushel	. .	. .	. .
Cabbage	50 Pounds	13,387	. .	. .
Carrots	Dozen bunches	. .	. .	. .
Celery	Crates	421,590	313,015	246,461
Corn, sweet	Crates	692,082	586,075	774,653
Cucumbers	Bushel	. .	. .	849
Eggplant	Bushel	. .	. .	. .
Endive and escarole	Bushel	. .	. .	20,739
Greens	Dozen bunches	22,600	. .	. .
Lettuce	Crates	. .	. .	. .
Okra	Bushel	. .	. .	. .
Onions	Dozen bunches	. .	. .	. .
Peas, green	Bushel	. .	. .	. .
Peas, southern	Bushel	. .	. .	. .
Peppers	Bushel	. .	. .	673
Potatoes, Irish	50 Pounds	55,374	63,214	31,849
Radishes	Dozen bunches	29,227	18,500	. .
Squash	Bushel	. .	. .	974
Tomatoes	60 Pounds	. .	. .	. .

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 73.--Extension

Ending					
1955	1956	1957	1958	1959	1960
..	750	..	..	..	..
12,327	..	..	..	..	..
..
9,875	30,360	41,135	51,372	..	40,779
..
..	315,289	383,068	206,310	254,392	566,618
874,696	1,056,395	715,568	915,431	1,183,813	1,155,864
..	..	36,471	4,062	29,650	..
..	..	..	5,000	..	..
..	1,685	..	..	1,062	..
15,750	8,771	..	..	..	..
..	..	..	..	3,125	..
..	337	..	..	..	..
2,550	..	..	..	..	..
..
..	875	..	..	..	..
..	10,675	12,785	26,335	..	24,754
44,162	..	52,810	88,163	43,226	98,271
..
..	2,650	6,763	32,708	4,800	8,543
..

The market at Pompano had sales the year it began operating that were nearly as large as those for Plant City in its first year. Unlike Plant City, however, sales have increased to more than ten times the first-year level. Sales the first year were \$2,194,298 (Table 74). In 1960, the highest sales were reached, \$22,565,982, amounting to 46 per cent of total state market produce sales. They were 43 per cent of state market sales for all products. As early as 1943, sales at the Pompano market reached a higher level than those of any other state market -- a position they have consistently maintained.

Annual income has not increased in proportion to sales. It has been relatively low compared to the volume of business and has ranged from \$8,368 to \$58,746. Several markets have shown higher income than Pompano on many occasions. However, income at the Pompano market has covered operating expenses adequately except in 1943, when a loss of \$2,465 was reported. Operational profits for this market have remained comparatively small, ranging from \$945 to \$14,036. Profits in excess of \$10,000 are reported for only four years. The consistently favorable operating statements turned in by this market year after year can be obtained only through expert budgeting, sound planning, and alert management.

TABLE 74.--Pompano State Farmers' Market for vegetables: Annual sales, major operational figures, and fixed assets valuation, 1940-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1940	2,194,298	8,368	4,894	3,474	3,472	130,875
1941	4,893,793	12,269	10,337	1,932	6,923	117,665
1942	5,273,451	12,003	9,228	2,775	6,680	117,835
1943	8,768,079	10,019	12,484	(2,465)	7,647	117,463
1944	8,750,205	12,240	11,295	945	8,162	117,472
1945	10,046,351	14,555	11,499	3,056	8,659	119,199
1946	11,174,139	16,240	13,936	2,304	9,648	119,539
1947	12,890,060	18,834	14,119	4,715	10,592	134,121
1948	8,827,435	17,844	15,264	2,580	11,000	134,807
1949	13,013,478	19,984	17,839	2,145	11,396	140,001
1950	12,673,472	24,207	19,735	4,472	12,480	147,861
1951	14,254,195	30,064	22,509	7,555	14,150	156,550
1952	15,667,418	37,381	29,143	8,238	19,566	173,266
1953	15,545,295	40,630	34,582	6,048	19,714	192,496
1954	16,140,956	40,466	36,113	4,353	20,856	365,124
1955	18,496,150	50,213	37,169	13,044	22,362	365,147
1956	21,503,180	47,687	43,651	14,036	24,943	409,518
1957	20,048,103	54,828	41,613	13,215	24,220	423,010
1958	17,485,922	54,071	46,985	7,086	27,982	438,897
1959	16,351,543	55,300	45,675	9,625	27,985	433,542
1960	22,565,982	58,746	48,559	10,187	30,594	449,071

Source: Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

Personnel expenses have moved upward in proportion to sales volume. They were \$3,472 in 1940 and \$30,594 in 1960. Fixed assets increased from \$130,875 in 1940 to \$449,071 in 1960.

Twenty vegetable items have been reported by the Pompano market for at least one year. Seven items -- Lima beans, snap beans, cucumbers, eggplant, peppers, squash, and tomatoes -- have been reported each year (Table 75). Two items -- okra and southern peas -- have been reported 16 times. Sweet corn and Irish potatoes have been reported 13 times. Seven items have been reported for three years or less. In addition to vegetables, tropical fruits have been reported occasionally.

Area 3 summary.--The five state vegetable markets in Area 3, as a group, have been in operation for periods ranging from 15 to 21 years. These markets have had sales adequate to make them strong, successful operations. Accumulated profits from vegetable markets operated in this area have amounted to \$413,097 (Table 76). Sales in recent years have been in excess of 13 times the value of fixed assets.

Sales in Area 3 during the first year of market operations, 1940, were \$2,315,000. Only one market, Pompano, operated in the area that year; and, as stated previously,

TABLE 75.--Pompano State Farmers' Market for vegetables:
Annual sales volume, by items, 1940-60

Item	Unit	Season	
		1940	1941
Beans, Lima	Bushel	30,972	32,928
Beans, snap	Bushel	660,501	1,371,507
Cabbage	50 Pounds	. .	. .
Cabbage, Chinese	50 Pounds	. .	. .
Cauliflower	Crates	. .	. .
Celery	Crates	. .	. .
Corn, sweet	Crates	. .	. .
Cucumbers	Bushel	8,986	16,666
Eggplant	Bushel	41,424	84,111
Greens	Dozen bunches	. .	. .
Lettuce	Crates	. .	. .
Okra	Bushel	. .	. .
Peas, green	Bushel	. .	1,008
Peas, southern	Bushel	. .	. .
Peppers	Bushel	94,379	475,888
Potatoes, Irish	50 Pounds	. .	4,598
Squash	Bushel	24,649	49,565
Strawberries	24 Pints	. .	. .
Tomatoes	60 Pounds	31,587	48,484
Watermelons	10 Melons	. .	. .

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 75.--Extension

Ending				
1942	1943	1944	1945	1946
33,128	22,445	32,012	77,442	92,379
1,756,985	1,675,323	1,818,112	1,594,669	1,845,666
..	..	..	231	..
..
..
..
..
41,435	38,860	45,993	75,211	118,387
110,125	208,544	203,151	287,883	306,889
..	..	..	6	100
..
..	..	..	124	1,209
..	504	5,316	3,959	1,533
..	..	..	14	229
526,471	861,123	1,374,655	1,391,075	1,174,550
..	..	..	460	..
65,347	117,736	122,636	134,977	173,775
..
42,660	48,815	96,112	98,153	51,953
..

TABLE 75.--Continued

Item	Unit	Season	
		1947	1948
Beans, Lima	Bushel	70,377	116,377
Beans, snap	Bushel	1,857,069	1,717,349
Cabbage	50 Pounds	. .	. .
Cabbage, Chinese	50 Pounds	. .	. .
Cauliflower	Crates	. .	. .
Celery	Crates	. .	. .
Corn, sweet	Crates	266	. .
Cucumbers	Bushel	259,495	182,307
Eggplant	Bushel	265,803	179,163
Greens	Dozen bunches	. .	. .
Lettuce	Crates	. .	. .
Okra	Bushel	2,655	4,151
Peas, green	Bushel	1,421	387
Peas, southern	Bushel	4,024	7,711
Peppers	Bushel	1,046,420	1,185,011
Potatoes, Irish	50 Pounds	125	. .
Squash	Bushel	173,153	180,541
Strawberries	24 Pints	. .	. .
Tomatoes	60 Pounds	24,782	4,709
Watermelons	10 Melons	. .	. .

Source: Florida, State Agricultural Marketing Board,
Annual Reports.

TABLE 75.--Extension

Ending				
1949	1950	1951	1952	1953
84,904	102,292	81,177	39,109	34,737
2,173,137	2,181,547	2,392,430	2,273,923	2,025,779
2,130	. .	3,880	7,197	1,596
.
. .	. .	. .	. .	944
. .	. .	. .	1,441	1,025
2,252	9,010	34,988	159,031	244,584
105,845	166,477	87,199	262,837	366,553
301,352	343,558	249,422	447,602	371,010
. .	. .	. .	. .	220
. .	. .	. .	. .	1,335
12,332	15,986	6,441	12,892	11,881
497	453	1,688	27	. .
15,377	26,818	11,912	15,424	17,899
1,777,400	1,824,605	1,927,614	1,784,977	1,556,284
. .	. .	5,508	13,998	26,687
250,952	299,151	362,523	312,758	344,828
. .	. .	. .	94	. .
12,262	8,498	3,704	4,676	3,855
.

TABLE 75.--Continued

Item	Unit	Season	
		1954	1955
Beans, Lima	Bushel	24,894	32,055
Beans, snap	Bushel	2,491,408	2,390,624
Cabbage	50 Pounds	790	3,498
Cabbage, Chinese	50 Pounds	50	. .
Cauliflower	Crates	. .	. .
Celery	Crates	. .	. .
Corn, sweet	Crates	291,731	228,488
Cucumbers	Bushel	454,691	619,903
Eggplant	Bushel	409,799	461,474
Greens	Dozen bunches	. .	. .
Lettuce	Crates	. .	. .
Okra	Bushel	8,022	14,113
Peas, green	Bushel	. .	. .
Peas, southern	Bushel	10,231	12,700
Peppers	Bushel	1,551,536	2,215,058
Potatoes, Irish	50 Pounds	17,498	17,374
Squash	Bushel	353,708	512,503
Strawberries	24 Pints	. .	. .
Tomatoes	60 Pounds	1,722	19,426
Watermelons	10 Melons	44	. .

Source: Florida, State Agricultural Marketing Board, Annual Reports.

TABLE 75.--Extension

Ending				
1956	1957	1958	1959	1960
29,674	15,035	9,634	14,200	11,689
2,316,242	1,956,792	1,393,753	1,339,644	1,474,398
12,351	1,152	4,176	207	. .
.
.
.
238,723	346,962	177,588	141,084	65,718
901,114	907,670	683,992	624,772	797,160
586,148	563,472	372,477	517,878	508,161
.
6,920	225	. .	. .	. .
16,851	29,410	18,948	26,281	20,536
.
24,911	21,795	18,378	20,791	22,836
2,637,820	1,985,071	1,090,965	1,757,157	1,864,183
57,612	17,693	9,403	11,378	16,146
478,247	384,053	301,681	249,644	450,881
.
44,816	73,674	53,680	120,132	238,655
486	35	. .	. .	. .

TABLE 76.--All Florida state vegetable markets in Area 3: Annual major operating figures and fixed assets valuation of five state vegetable markets, 1940-60

Season Ending	Sales	Income	Operating Expenses	Profit or Loss ^a	Personnel Expenses	Fixed Assets
	(\$1,000)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1940	2,315	8,954	5,394	3,560	3,743	180,381
1941	5,157	13,407	11,555	1,852	8,000	156,754
1942	5,490	14,347	12,110	2,237	9,062	234,113
1943	10,850	19,042	22,113	(3,071)	14,093	235,184
1944	11,294	26,325	22,495	3,830	16,142	235,071
1945	13,228	35,675	26,755	8,920	18,628	247,767
1946	16,135	46,264	37,066	9,198	24,192	347,842
1947	17,136	40,171	34,552	5,619	25,965	417,186
1948	11,789	34,628	35,885	(1,257)	23,208	485,555
1949	19,013	63,659	39,576	24,083	25,502	491,550
1950	18,303	98,477	68,135	30,342	29,291	493,505
1951	21,678	81,902	55,637	26,265	35,968	523,480
1952	24,335	100,031	74,286	25,745	48,467	668,074
1953	23,120	108,088	92,459	15,629	53,413	832,083
1954	23,796	133,947	117,168	16,779	58,594	1,225,576
1955	27,962	160,325	112,724	47,601	63,401	1,320,293
1956	32,196	173,439	127,158	46,281	70,041	1,494,996
1957	32,479	183,657	121,872	61,785	67,234	1,683,405
1958	26,721	150,639	133,188	17,451	76,696	1,894,660
1959	28,355	175,716	134,729	40,987	77,282	1,952,467
1960	35,030	158,452	129,191	29,261	75,841	2,008,389
Total	..	..	..	413,097	..	..
Average	..	..	..	19,671	..	..

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

this market had a profitable first year. Sales in this area increased through the years, and reached a high in 1960 of \$35,030,000. This was nearly 17 times greater than first-year sales.

Income, from operations of Area 3 markets, was high enough to cover operating expenses in all except two years. For 1948, the income shortage was undoubtedly caused by a 30 per cent reduction in sales volume from the previous year. Income for this year decreased about 12 per cent below 1947. The other year when an operational loss was reported, 1943, the opposite was true. For that year, sales volume had increased 97 per cent from the previous year and revenue had increased 32 per cent; but expenses also increased sharply and a loss of \$3,071 was reported. Combined profits for the markets in Area 3 averaged \$19,671 annually. In 1947, a high of \$61,785 in combined profit was reported.

Personnel expenses for the markets in Area 3, as a group, remained below those for Area 2 until 1958. For the last three years, Area 3 personnel expenses exceeded those for Area 2. But sales volume has been two to three times greater than the sales volume in Area 2 since 1943. Area 3 personnel expenses in 1960 were \$75,851.

Fixed assets at vegetable markets in Area 3 remained

well below those for Area 2 during the entire period of operations. They increased from \$180,381, in 1940, to \$2,008,398 in 1960.

Summary of All State Vegetable Markets

Sales at the State Farmers' Markets where vegetables are sold have increased. They were \$519,000 in 1935 and \$49,417,000 in 1960 (Table 77). Income for all of the state vegetable markets increased from \$3,091 in 1935, to \$343,674 in 1956. Since 1956, it has declined slightly, and was \$312,773 in 1960. Operating expenses increased as additional markets were added and as personnel expense moved upward. Expenses for operations reached a maximum in 1956. Since then, they have decreased slightly. Personnel expenses reached a maximum in 1959, after experiencing an annual increase in all except three years. Personnel expenses have been more than 50 per cent of total operating expenses during all years except 1954, when they were slightly below that level.

Operational profits for the state vegetable markets have been reported for 25 years. Only in one year, 1938, was an operational loss of \$533 reported. Profits from operations have ranged from \$246 to \$69,654. The maximum

TABLE 77.--All Florida state vegetable markets: Annual major operating figures and fixed assets valuation, 1935-60

Season Ending	Sales ^a	Income	Operating Expenses	Profit or Loss ^b	Personnel Expenses	Fixed Assets
	(\$1,000)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1935	519	3,091	2,345	746	1,568	57,614
1936	750	4,962	4,634	328	3,079	57,750
1937	613	6,188	5,942	246	3,757	88,999
1938	828	14,324	14,857	(533)	10,622	171,032
1939	3,309	23,172	21,564	1,608	15,340	464,603
1940	6,056	41,940	37,490	4,450	23,190	697,947
1941	8,797	47,214	43,808	3,406	30,446	618,311
1942	9,753	67,880	52,786	15,094	38,962	743,117
1943	15,769	63,849	59,324	4,525	37,500	743,993
1944	17,422	88,461	67,238	21,223	47,150	761,173
1945	18,920	89,198	68,555	20,643	48,181	789,599
1946	25,272	119,696	86,579	33,117	60,790	888,787
1947	26,946	116,226	88,652	27,574	67,607	1,148,538
1948	23,778	136,132	102,354	33,778	70,709	1,275,449
1949	33,303	179,114	116,405	62,709	77,606	1,384,999
1950	32,395	227,941	160,577	67,364	83,309	1,396,195
1951	36,780	203,692	144,685	59,007	95,325	1,590,667
1952	42,116	243,534	173,880	69,654	117,496	1,849,278
1953	37,605	255,806	221,203	34,603	132,775	2,051,987
1954	36,447	293,971	270,907	23,064	134,048	2,904,637
1955	44,955	338,919	297,439	41,480	150,808	3,185,608
1956	46,079	343,674	298,541	45,133	155,580	3,444,571
1957	45,778	337,217	282,614	54,603	151,593	3,635,284
1958	37,270	294,940	272,398	22,542	159,346	4,340,390
1959	42,873	326,933	274,870	52,063	164,741	4,348,310
1960	49,417	312,773	263,381	49,392	160,730	4,497,183
Total	∴	∴	∴	747,819	∴	∴
Average	∴	∴	∴	28,762	∴	∴

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

^aSales at vegetable markets exceed Florida-produced vegetable sales; since fruit, flowers, and other items, including some out-of-state products, are handled.

^bLoss shown in parentheses ().

was reached in 1952. The operational profits in 1960 were \$49,392.

Cumulative profits from all vegetable markets amounted to \$747,819 for the 26 years of operation. This amount is substantially above that from all state markets (see Tables 38 and 77). All markets' profits for 26 years were only \$604,467 because non-vegetable markets, as a group, showed a loss. Vegetable markets showed an average annual profit of \$28,762, while the average annual profit of all state markets was \$23,249.

Fixed assets for all state vegetable markets increased from \$57,614, in 1935, to \$4,497,813 in 1960. Sales in recent years have amounted to ten times or more the value of fixed assets.

Vegetable Acreage, Number and Size of
Vegetable Farms, and State Vegetable Markets

Perhaps some of the explanation for the high degree of success for state vegetable markets in Area 3, the moderate success of those in Area 2, and the general lack of success of those in Area 1, can be found in the degree of concentration of vegetable acreage, the number of vegetable farms, and the specialization of vegetable production in

the three areas. In Chapter II, Table 9 presents the number of vegetable farms, as well as the average acreage of vegetables harvested per vegetable farm by areas. Table 10 shows vegetable acreage for the three areas.

Area 1, which comprises a larger geographical territory than Areas 2 or 3, had the smallest acreage of vegetables in 1959, and had been losing vegetable acreage since 1929. Likewise, Area 1 has been losing vegetable farms. Between 1929 and 1959, the number of farms reporting commercial vegetables in Area 1 declined from 6,502 to 2,041. However, those vegetable farms that remain are producing vegetables on more acres. The average vegetable acreage on vegetable farms in the area increased from 6.5 acres to 18.6 acres.

Area 2 comprises the second largest geographical area. Vegetable acreage in this area has been increasing since 1899, and in 1959 was over twice that of Area 1. Vegetable farms in Area 2 have decreased in number, just as they have in Area 1. The average vegetable acreage per vegetable farm in Area 2 has increased from 8.0 acres to 41.5 acres.

Area 3 is the smallest geographical area, but it has the largest vegetable acreage. Its vegetable acreage has increased since 1899, and in 1959 was half again larger than

Area 2. Area 3 has followed the trends to fewer vegetable farms and larger average vegetable acreage per vegetable farm. Average acreage of vegetables per vegetable farm increased from 16.0 acres to 240.4 acres.

Some of the prerequisites for successful vegetable markets seem to be revealed in this comparison of the three areas. The more successful markets appear to be in areas with a heavy concentration of commercial vegetable acreage. The successful markets were also in areas where vegetable farmers specialized in vegetable growing and had large average vegetable acreages per vegetable farm.

Carlot Volume by Areas of
All Vegetables Combined

Shipments of all vegetables combined from Florida more than doubled between 1939 and 1955. During this period, shipments increased from 57,163 carlot equivalents to 170,933 (Table 78). Since the 1954-55 season, shipments have declined; and by the 1959-60 season, there were only 109,470 carlot equivalents.

The volume of vegetables handled at state markets has followed about the same trend as total shipments from Florida. Total vegetables handled at state markets in 1939

TABLE 78.--Florida State Farmers' Markets for vegetables:
 Carlot volume of all vegetables combined shipped from Florida
 and those reported by state markets annually, by areas,
 1939-60

Season Ending	Shipped from Florida (Carlot equivalent)	Recorded at State Farmers'		
		Total ^c	Area 1	Area 2
		(Carlot equivalent)	(Carlot equivalent)	(Carlot equivalent)
1939	57,163	3,429	98	3,330
1940	58,914	5,456	304	3,471
1941	51,712	7,583	168	3,460
1942	55,825	9,072	108	4,007
1943	^b	9,820	82	2,880
1944	54,823	12,531	3	3,540
1945	58,427	12,180	69	2,961
1946	70,642	15,092	2	4,773
1947	58,665	13,881	175	2,796
1948	71,139	15,538	50	7,115
1949	89,047	19,440	151	7,469
1950	98,887	21,827	243	8,966
1951	122,659	21,091	136	8,945
1952	125,213	24,108	346	9,889
1953	126,727	23,090	285	9,926
1954	124,554	24,265	391	9,476
1955	170,933	27,890	468	10,470
1956	126,522	26,158	235	8,743
1957	110,934	21,844	734	5,886
1958	96,441	16,501	215	5,706
1959	96,736	20,229	249	6,657
1960	109,470	21,595	201	7,365

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports; and Florida, State Marketing Bureau, Annual Agricultural Statistical Summaries, 1939-60.

^aLess than 0.05 per cent.

^bShipping data are incomplete or unavailable.

^cVariation between total and the sum of the areas is caused by rounding off.

TABLE 78.-- Extension

Markets	Per Cent of State Shipments Recorded at State Markets			
Area 3 (Carlot equivalent)	Total (Per cent)	Area 1 (Per cent)	Area 2 (Per cent)	Area 3 (Per cent)
....	6	a	6	0
1,680	9	1	5	3
3,966	15	a	7	8
4,937	16	a	7	9
6,859	b	b	b	b
8,981	23	a	7	16
9,150	21	a	5	16
10,312	21	a	7	14
8,897	24	a	8	16
8,220	22	a	10	12
11,876	22	a	8	14
12,608	22	a	9	13
11,938	17	a	7	10
13,875	19	a	8	11
12,877	18	a	8	10
14,504	19	a	8	11
16,662	16	a	6	10
17,179	21	a	7	14
15,531	20	1	5	14
10,840	17	a	6	11
13,323	21	a	7	14
14,370	20	a	7	13

amounted to 3,429 carlots. The largest volume, 27,890 carlot equivalents, was reported in 1955. In 1960, the volume of vegetables handled at state markets was 21,595 carlot equivalents.

The largest proportion of state shipments handled at state markets in any one year was 24 per cent, reported in 1947. More recently, the proportion of state vegetable supplies going through state markets has been around 20 per cent.

Area 1 state markets have never reported sales which amounted to any more than 1 per cent of the total state vegetable shipments. In only two years was it as much as 1 per cent, 1940 and 1957. Three hundred and four and 734 carlot equivalents were reported at Area 1 markets for those two seasons. In all other years, less than 1 per cent of the state vegetable supplies were handled at Area 1 state markets. However, it should be pointed out that Area 1 had only one state vegetable market until the 1951-52 season. It now has four such markets, while each of the other two areas has five.

Area 2 had a high of 10,470 carlot equivalents of vegetables reported at state markets, in 1955. In 1960, state markets in Area 2 reported 7,365 carlot equivalents

of vegetables. Vegetable volume at the state markets in this area reached a high of about 10 per cent of the state vegetable supplies in 1948. In 1960, 7 per cent of the state supplies was reported at Area 2 markets.

Area 3 state market vegetable volume has exceeded that for other areas since 1941. Volume at state markets in this area reached 17,179 carlot equivalents in 1956. In 1960, these markets reported 14,370 carlots of vegetables. Sixteen per cent of state vegetable shipments has been reported by Area 3 state markets several times. In 1960, 13 per cent of state vegetable supplies was handled at state markets in this area.

Principal Products at State Markets

Vegetable products handled at the state vegetable markets during the period from 1956 to 1960 have been arranged in descending order on the basis of carlot equivalents in Table 79. These products are shown on a volume-per-market basis, since the number of markets in each area was not equal. Tomatoes, peppers, snap beans, cucumbers, sweet corn, cabbage, squash, celery, Irish potatoes, and eggplant were the ten principal items handled by all state markets combined.

Area 1 markets reported only a total of 14 items.

TABLE 79.--Vegetable products handled at state vegetable markets in order of importance on a per market basis, by areas, 1955-56 to 1959-60 season

Item	Per Market in Florida	Per Market in Area 1	Per Market in Area 2	Per Market in Area 3
	(Carlot equiv- alents)	(Carlot equiv- alents)	(Carlot equiv- alents)	(Carlot equiv- alents)
Tomatoes	307	1	475	384
Peppers	222	4	59	559
Beans, snap	213	17	58	525
Cucumbers	185	7	101	411
Corn, sweet	160	5	43	402
Cabbage	105	4	274	16
Squash	66	2	43	100
Celery	64	. .	56	123
Potatoes, Irish	57	28	92	61
Eggplant	54	. .	9	141
Watermelons	20	3	15	37
Peas, southern	19	3	44	7
Strawberries	10	5	23	. .
Lettuce	9	. .	24	1
Other vegetables	8	2	14	8
Beans, Lima	7	2	12	5
Cauliflower	5	. .	14	. .
Endive and escarole	4	. .	11	. .
Bunched vegetables	2	1	5	1
Radishes	2	. .	5	. .
Cantaloupe	1	. .	. .	3
Total	1,520	84	1,377	2,784

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

The average volume per vegetable market in this area was 84 carlots annually between 1956 and 1960.

The important vegetables at state markets in Area 2 were tomatoes, cabbage, cucumbers, Irish potatoes, peppers, snap beans, celery, southern peas, and sweet corn. The average volume per market in Area 2 was 1,377 carlots during the last five years of the period studied.

Leading items at the state vegetable markets in Area 3 were peppers, snap beans, cucumbers, sweet corn, tomatoes, eggplant, celery, squash, Irish potatoes, and watermelons. The markets in this area averaged 2,784 carlot amounts of vegetables annually for the five years from 1956 to 1960.

Value of Vegetables Sold
at State Markets by Areas

The total farm value of vegetables in Florida was increasing until 1955, when it reached \$184,086,000. Since then it has declined; and, in 1960, it was \$159,082,000. Sales at state markets of Florida-produced vegetables reached a maximum in 1960 of \$46,358,000. This amount was handled at all state markets, not just the 16 designated specifically as vegetable markets. Florida-produced vegetable sales reported by other than vegetable markets have been included.

Florida vegetable sales at Area 1 state markets reached a high of \$579,000 in 1957 (Table 80). They were \$324,000 in 1960. Area 1 Florida vegetable sales at state markets were equal to 6 per cent of the farm value on Florida vegetables for 1940. They were 1 per cent of the farm value in 1947. In all other seasons, Florida vegetable sales at Area 1 markets were less than half of 1 per cent of the farm value of vegetables in Florida.

Florida-produced vegetable sales at state markets in Area 2 reached a maximum of \$15,618,000 in 1952. They had declined to \$11,781,000 by 1960. Sales of these products in Area 2 state markets equaled 12 per cent of the farm value of all Florida vegetables in 1948 and were 7 per cent in 1960.

Florida-produced vegetable sales at Area 3 state markets have exceeded those in the other two areas since 1940. They have increased steadily throughout the period of state market operations in this area. The peak in sales of these items at Area 3 state markets was reached in 1960, when they amounted to \$34,253,000. The proportion of all Florida vegetables combined which were sold at Area 3 markets has increased steadily also. It was 1 per cent the first season state markets opened in Area 3, and 22 per cent in 1960.

TABLE 80.--Farm value of all Florida vegetables, state vegetable market sales, and the proportion of farm value reported by state markets annually, by areas, 1939-60

Season Ending	Farm Value	State Vegetable Markets ^b			
		State	Area 1	Area 2	Area 3
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
1939	40,385	3,221	35	3,186	. .
1940	37,253	5,757	270	3,172	2,315
1941	41,290	8,683	131	3,395	5,157
1942	52,131	9,552	194	3,868	5,490
1943	77,496	15,079	194	4,123	10,762
1944	82,522	15,984	120	4,507	11,357
1945	96,792	17,931	175	4,533	13,223
1946	98,383	24,176	413	7,629	16,134
1947	85,405	25,234	381	8,537	16,316
1948	90,977	22,218	126	11,002	11,090
1949	121,557	30,819	299	12,209	18,311
1950	110,010	30,609	488	12,529	17,592
1951	138,248	34,129	327	12,949	20,853
1952	158,997	39,634	506	15,618	23,510
1953	141,614	34,752	465	11,932	22,355
1954	136,405	33,939	423	10,354	23,162
1955	184,086	42,267	500	14,385	27,382
1956	180,372	43,230	462	11,155	31,613
1957	162,663	42,622	579	10,363	31,680
1958	132,181	34,754	366	8,245	26,143
1959	143,933	39,787	427	11,623	27,737
1960	159,082	46,358	324	11,781	34,253

Source: Florida, State Marketing Bureau, Annual Agricultural Statistical Summary; and calculated from Florida, State Agricultural Marketing Board, Annual Reports, 1939-60.

^aLess than 0.05 per cent.

TABLE 80.--Extension

Proportion Handled by State Vegetable Markets			
State	Area 1	Area 2	Area 3
(Per cent)	(Per cent)	(Per cent)	(Per cent)
8	a	8	0
16	6	9	1
21	a	8	13
18	a	7	11
20	a	6	14
19	a	5	14
19	a	5	14
25	a	8	17
30	1	10	19
24	a	12	12
25	a	10	15
27	a	11	16
25	a	10	15
25	a	10	15
25	a	9	16
25	a	8	17
23	a	8	15
24	a	6	18
26	a	6	20
26	a	6	20
28	a	8	20
29	a	7	22

Summary of the Markets that Closed

The state vegetable markets at Bushnell and at Palmetto were closed after several years of operation at each location. The best explanation seems to be that farmers in the vicinity of these two markets failed to use them, for reasons stated below.

At Bushnell, vegetable production was not adequate to support two markets, and a majority of the growers preferred to use a market which they had financed and built at Webster. As a result, the state market at Bushnell was never able to attract sufficient quantities of vegetables on a regular basis to justify produce buyers' patronizing the market. Without buyers, there was no competition, and the few growers who tried selling at the Bushnell market were soon discouraged. Sales at that market remained low and the volume of produce handled was too small to produce income adequate to cover operating expenses.

It should be pointed out that the intent of the law establishing the state market system specified that the purpose was to " . . . aid, promote, and foster . . ." marketing associations. The Bushnell state market was established within six miles of a well-established, but struggling, marketing association, which operated a public shipping-point

auction market. Instead of aiding, promoting, and fostering the Webster cooperative market, this state market entered into competition with it. The growers remained loyal to their own marketing association and the state market was finally closed.

The Palmetto state market at one time had a relatively large volume of sales, as well as income adequate to cover operating costs. During the early years of its operation, produce buyers were patronizing the market, competition was active, and growers were selling their products at the market with regularity.

With the advent of mechanized farming in the area came larger farms and specialized activity. Some larger growers opened their own packing and selling organizations, and took on the responsibility of preparing and selling the products of their neighbors, as well as their own. At the same time, produce distributors were becoming larger and fewer. They wanted large quantities of standardized products that could be bought on specifications. Packing-house sales organizations were prepared to provide the services that larger buyers were demanding. Most of the small growers were soon being financed by the packing-house operators and could no longer patronize the market. Most of

the packing sheds were not on the market property.

Later, marketing associations were organized in the Palmetto area and many of the smaller growers who had been dependent on the state market joined a cooperative. It wasn't long after this before the state-market sales dwindled to a very low level. With low volume came lack of competitive buying, and the remaining few grower-patrons sought alternative means of selling.

Several years before the closing of the Palmetto market, the facilities were leased to private operators whose business was more like wholesale-produce distributors than farm-product assemblers. The value of the location as a State Farmers' Market was gone. The market was finally closed in 1959 and sold.

CHAPTER VI

CHARACTERISTICS OF HIGH- AND LOW-VOLUME VEGETABLE MARKETS

The terms "successful markets" and "unsuccessful markets" have been used sparingly because of the difficulty in finding satisfactory definitions. A profit-and-loss analysis is objected to by some on the grounds that it permits no evaluation for social benefits. Volume of business, on the other hand, finds general agreement as a measure of success because it indicates usage of the market. Buyers, sellers, and market managers stated emphatically that volume of business was the most important factor contributing to the success or failure of shipping-point fruit and vegetable markets in a study conducted by the United States Department of Agriculture.¹ However, volume of business alone is not sufficient as a measure of success, because market expenses are not paid from this category. As a general rule, income

¹U. S., Department of Agriculture, Farmers' Produce . . ., pp. 34-35.

adequate to pay expenses is easier for a market with a relatively low volume of business; but an observation will reveal that even the multimillion-dollar-sales markets failed to pay expenses at times. Two of them were frequently unable to pay expenses.

Some State Farmers' Markets for vegetables have been successful by all standards. A few have operated for long periods without obtaining a volume of business large enough to justify their existence. Others have never been able to pay their costs of operation and maintenance. Confronted with this situation, plus the fact that relatively high-volume markets are popular with buyers and sellers, are considered successful, and most frequently make an operating profit, an effort was made to contrast the differences between successful and unsuccessful markets by comparing four multimillion-dollar-sales markets that have shown consistent annual profits with four relatively low-volume markets that have shown consistent annual losses. These two groups represent the extremes among state vegetable markets for volume of business and financial results. The first group is called high-volume markets and contains those markets that reported the highest volume of business and showed the largest profits above operating expenses most of the seasons since 1950. The

second group is referred to as low-volume markets and contains those markets that reported the lowest volume of business and had an operational loss most of the seasons since 1950.

The high-volume markets are Florida City, Fort Pierce, Pompano, and Sanford. The low-volume markets are Bonifay, Brooker, Gadsden County, and Starke.

A market area is usually considered to be an area with a radius of about 20 miles around the market. Several studies have indicated that growers are reluctant to haul their produce more than 20 or 25 miles to an assembly market.² However, in some cases, Florida State Farmers' Markets consistently receive vegetables from distances in excess of 40 miles. The 20-mile-radius limit was used, insofar as data permitted, to compare how well the various markets have served their respective areas.

Figure 5 shows the locations and market areas of

²"Over 80 per cent of these loads and 70 per cent of the volume sold originated within a 15 mile radius of the market." U. S., Department of Agriculture, Farmers' Produce . . . , p. 57; "The average distance these growers traveled to the auction was 7.7 miles and only 5 per cent of them traveled more than 20 miles." U. S., Department of Agriculture, Cooperative Fruit and Vegetable Shipping-Point Auctions, Farm Credit Administration Bulletin No. 64 (Washington: U. S. Government Printing Office, 1951), p. 43; "The diameter of the average area served by these 64 auctions was estimated at about 21 miles." Cake, p. 12.

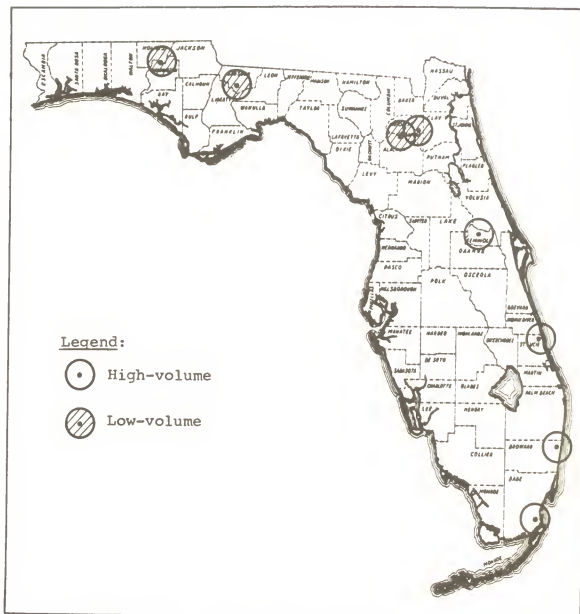


Figure 5.--Florida: Location of State Farmers' Markets and market areas of the high-volume and low-volume vegetable markets.

the eight markets included in the analysis in this chapter. The high-volume markets are in central and south Florida. Two are in Area 2 and two are in Area 3. The four low-volume markets are in north and west Florida and all are in Area 1.

Importance of Volume

Buyers have indicated that a relatively large volume of business at a market was essential before they would patronize it, for two reasons: (1) They needed a fairly large quantity of produce each day in order to pay overhead and fixed expenses; and, (2) as volume per day increased, there was less day-to-day variation in volume and they needed dependable supplies because their daily requirements were usually rather uniform. Growers pointed out that a market must handle relatively large volumes before buyers would patronize it and that, without a relatively large number of buyers, the growers had no assurance that they would receive equitable prices for their products or that the products could even be sold. Market managers stated that, unless the volume of business on a market was relatively large, it was difficult to keep down the per package costs

of operation to a level that would attract buyers and sellers.³

Operating Results

Income and expense information was available for the low-volume and high-volume state vegetable markets from 1938 through 1960. Product and carlot volume information was available from 1939 through 1960. Comparisons between high-volume and low-volume markets were made for each of the important elements of income and expense as well as the physical volume.

Average annual dollar sales per market, income, and selling costs per sales dollar for the high-volume and low-volume groups of state vegetable markets are presented in Table 81. The spread in dollar sales per market between these two groups ranged annually from several hundred thousand dollars to several million dollars. Average market sales in the low-volume group were highest in 1950 at \$490,290. The same year in the high-volume group, they were \$6,144,519. Average sales per year for the period from 1939 through 1960 were \$190,244 per market for the low-volume markets and \$5,046,290 for the high-volume markets. Average

³U. S., Department of Agriculture, Farmers' Produce . . . , pp. 34-35.

TABLE 81.--Average sales and annual income for high-volume and low-volume state vegetable markets, 1938-60

Year Ending	Sales per Market	
	High-Volume	Low-Volume
	(Dollars)	(Dollars)
1938	455,301	1,789
1939	534,473	36,472
1940	984,815	277,803
1941	1,462,175	175,736
1942	1,610,514	111,964
1943	2,717,648	111,537
1944	2,839,452	350,884
1945	3,333,514	60,520
1946	4,215,758	4,017
1947	5,618,321	456,952
1948	4,198,301	118,753
1949	6,326,546	295,420
1950	6,144,519	490,290
1951	7,205,401	347,016
1952	7,661,723	260,228
1953	6,725,459	240,728
1954	6,586,860	217,554
1955	7,999,184	165,730
1956	8,126,934	179,655
1957	8,201,931	185,368
1958	6,857,186	94,240
1959	7,404,657	89,919
1960	8,853,994	103,037
Average for all seasons	5,046,290	190,244
Average 1956-60	7,888,940	130,443

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

TABLE 81.--Extension

Income per Market		Income per Dollar of Sales	
High-Volume	Low-Volume	High-Volume	Low-Volume
(Dollars)	(Dollars)	(Cents)	(Cents)
5,386	192	1.2	10.7
6,441	358	1.2	1.0
5,405	2,366	.5	.8
5,402	2,480	.4	1.4
6,495	3,459	.4	3.1
5,898	3,215	.2	2.9
9,081	2,184	.3	.6
12,035	1,190	.4	2.0
15,637	263	.4	6.5
16,410	2,648	.4	.6
18,648	1,237	.4	1.0
29,414	3,627	.5	1.2
40,223	5,509	.7	1.1
34,737	3,213	.5	.9
36,092	3,778	.5	1.5
34,583	4,522	.5	1.9
41,167	7,921	.6	3.6
44,749	4,598	.6	2.8
46,072	3,870	.6	2.2
44,973	4,598	.5	2.5
37,592	3,027	.5	3.2
45,531	2,650	.6	2.9
41,034	2,983	.5	2.9
. .	. .	.5	2.5
. .	. .	.5	2.7

sales for these markets in the last five years were \$130,443 and \$7,888,940, respectively.

Income collected from growers and buyers who use the markets is the same as an expense of operation to those growers and buyers. This expense to market users per dollar of market sales has been considerably higher for the low-volume markets than for the high-volume markets. Average market costs per sales dollar to market users have been two and one-half cents for the low-volume markets and one-half of one cent for the high-volume markets. These costs per sales dollar for the last five years have been two and seven-tenths cents per sales dollar for the low-volume markets and one-half of one cent for the high-volume markets. The costs to market users per dollar of sales at the low-volume markets have amounted to less than one cent for four years during the period studied, and they have been as high as 10.7 cents for one year. These costs at the high-volume markets have exceeded one cent per dollar of sales on only two occasions, and they have been as low as .2 of one cent for one year.

Profit-and-loss figures per market for the high- and low-volume groups have shown profits every year for the high-volume markets and annual losses each year on the low-volume markets except for 1945 and 1950 (Table 82). In the 23 years

TABLE 82.--Profit or loss annually for high-volume and low-volume state vegetable markets, 1938-60

Year Ending	Operational Profit or Loss per Market ^a	
	High-Volume	Low-Volume
	(Dollars)	(Dollars)
1938	883	(269)
1939	293	(588)
1940	1,679	(416)
1941	634	(4)
1942	1,364	(554)
1943	167	(2,008)
1944	2,323	(4)
1945	3,809	318
1946	5,968	(1,955)
1947	6,260	(2,135)
1948	6,512	(6,605)
1949	13,725	(1,927)
1950	15,746	618
1951	13,999	(1,253)
1952	14,097	(671)
1953	8,068	(3,401)
1954	6,089	(406)
1955	3,366	(2,798)
1956	11,216	(2,547)
1957	12,818	(2,358)
1958	4,784	(3,203)
1959	14,374	(4,058)
1960	9,329	(3,533)
Total	157,503	(39,757)
Average for all seasons	6,848	(1,729)
Average for last five years	10,504	(3,140)

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

^aLoss shown in parentheses ().

studied, the average market in the high-volume group reported an accumulation of \$157,503 in profits. During the same period, the average market in the low-volume group reported an accumulation of \$39,757 in operational loss. The 23-year period shows an average annual profit of \$6,848 per market for the high-volume group and an average annual loss of \$1,729 per market for the low-volume group. Operational results for the five-year average from 1956 through 1960 showed an average annual profit of \$10,504 per high-volume market and a loss of \$3,140 per low-volume market.

Average fixed-assets valuation per market per year for the 23-year period were \$225,541 for the high-volume group and \$47,013 for the low-volume group (Table 83). Fixed-assets valuation per market per year for the last five years of the study period were \$494,871 for the high-volume group and \$86,631 for the low-volume group.

Average fixed assets per market per year for the high-volume markets were five times or more greater than those for the low-volume markets. Likewise, sales per dollar of fixed assets per year for the high-volume market group were five times or more greater than those for the low-volume markets. The sales per dollar of investment in fixed assets have averaged \$1.50 during the last five years

TABLE 83.--Fixed assets annually for high-volume and low-volume state vegetable markets, 1938-60

Year Ending	Fixed Assets Valuation per Market		Sales per Dollar of Fixed Assets	
	High-Volume	Low-Volume	High-Volume	Low-Volume
	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1938	73,550	10,270	6.19	.17
1939	83,143	18,181	6.43	2.01
1940	89,318	27,818	11.03	9.99
1941	73,439	32,680	19.91	5.38
1942	74,041	33,707	21.75	3.32
1943	74,418	33,912	36.52	3.29
1944	74,438	33,879	38.15	10.36
1945	76,591	32,566	43.52	1.86
1946	91,551	32,419	46.05	.12
1947	113,558	28,720	40.67	15.91
1948	135,817	28,796	30.91	4.12
1949	161,006	29,841	39.29	9.90
1950	158,842	40,883	38.68	11.99
1951	200,729	49,893	35.90	6.96
1952	228,945	32,765	33.47	7.94
1953	260,968	41,494	25.77	5.80
1954	366,075	67,137	17.99	3.24
1955	376,663	73,192	21.24	2.26
1956	408,082	83,409	19.91	2.15
1957	423,437	92,389	19.37	2.01
1958	533,211	84,282	12.86	1.12
1959	551,148	80,433	13.43	1.12
1960	558,478	92,644	15.85	1.11
Average				
for all				
seasons				
	225,541	47,013	25.86	4.88
Average				
for last				
five				
years				
	494,871	86,631	16.28	1.50

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

for the low-volume markets and \$16.28 for the high-volume markets.

Carlot Quantities Handled

Carlot quantities of vegetables handled per market in the high-volume group have greatly exceeded the amount per market in the low-volume group (Table 84). Maximum carlot equivalents of produce sold per market reported by the high-volume markets were 5,174 in the 1954-55 season. The maximum carlot equivalents of produce per market reported by the low-volume group were 304 in the 1939-40 season. Carlot equivalents per market per year for the 22 years that figures were available averaged 2,964 for the high-volume markets and 116 for the low-volume markets. During the last five years, the carlots per market per year averaged 3,589 for the high-volume markets and 70 for the low-volume markets.

The expense of handling vegetables per carlot equivalent was calculated, assuming that income of state markets was the same as the costs to growers and buyers for using the markets. It has been shown in the preceding discussion that the high-volume markets had lower costs to users per dollar of sales than the lower-volume markets. This was in spite of much higher total income for the high-volume markets. Likewise, the costs to users per carlot

TABLE 84.--Carlot equivalents of vegetables reported by high-volume and low-volume state vegetable markets, and income per carlot, 1939-60

Year Ending	Carlot Equivalents of Vegetables per Market		Income per Carlot Equivalent	
	High-Volume	Low-Volume	High-Volume	Low-Volume
	(Carlot Equivalents)	(Carlot Equivalents)	(Dollars)	(Dollars)
1939	781	98	8.24	3.65
1940	857	304	6.31	7.78
1941	1,175	159	4.60	15.60
1942	1,460	129	4.45	26.81
1943	1,678	79	3.51	40.70
1944	2,189	3	4.15	728.00
1945	2,037	70	5.91	17.00
1946	2,217	2	7.05	131.50
1947	2,421	176	6.78	15.05
1948	2,847	50	6.55	24.74
1949	3,775	161	7.79	22.53
1950	4,220	243	9.53	22.67
1951	4,033	139	8.61	23.12
1952	4,303	174	8.39	21.71
1953	3,970	142	8.71	31.85
1954	4,118	191	10.00	41.47
1955	5,174	87	8.65	52.85
1956	4,447	77	10.36	50.26
1957	3,796	108	11.85	42.57
1958	2,704	53	13.90	57.11
1959	3,457	62	13.17	42.74
1960	3,540	48	11.59	62.15
Average for all seasons	2,964	116	8.19	67.36
Average for last five years	3,589	70	12.17	50.97

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

equivalent of vegetables were much lower for the high-volume markets. Charges to market users ranged between \$3.51 and \$13.90 per carlot amount at the high-volume markets, and between \$3.65 and \$728.00 per carlot for the low-volume markets (the \$728 figure for 1944 was caused by unusually low market sales due to wartime conditions). These costs per carlot per year averaged \$8.19 for the high-volume markets and \$67.36 for the low-volume markets over the 22-year period. During the last five years, the costs per carlot per year were \$12.17 for the high-volume markets and \$50.97 for the low-volume markets.

Costs per carlot equivalent of vegetables handled at low-volume markets were relatively high. But they were not nearly as high as they would have been if the state had charged enough at these markets to cover operating costs. The cost calculations for low-income markets were based on market income and did not include an additional average cost of \$44.85 per carlot incurred in operational loss from 1956 through 1960, for example. This cost, plus the \$50.97 mentioned above, add up to a total average cost of \$95.82 per carlot of vegetables marketed at low-volume markets during the 1956-60 period. Fifty dollars and ninety-seven cents were paid by growers and buyers, with \$44.85 being paid from

the State Treasurer's General Inspection Fund. The figures were even higher on the average for the whole 22-year period.

Length of Operating Season
and Daily Volume

Length of operating season for state vegetable markets is dependent upon the duration of the vegetable-harvesting period in the area. The high-volume markets were open an average of 180 days per season and the low-volume markets averaged 106 days (Table 85). Earlier work in this area found the largest-volume markets were open an average of 180.2 days per season and the smaller-volume markets were open 27.7 days per season. Average number of days open for all markets was 85.⁴

Some of the low-volume state vegetable markets were open in winter for the sale of pecans. This additional operating period increased the average days per season for these markets.

Average daily volume at vegetable markets is important if the markets are to attract adequate numbers of buyers and sellers. The high-volume markets had an average of 20.0 carlot equivalents of vegetables per day. Low-

⁴Ibid., p. 36.

TABLE 85.--Length of operating season for high-volume and low-volume state vegetable markets, and the average annual carlot volume for 1935-36 to 1959-60 seasons

Market Classifi- cation	Operating Season per Market	Carlot Volume per Market	Average Carlot Volume per Day
	(Days)	(Carlot Equivalents)	(Carlot Equivalents)
High-Volume	180	3,589	20.0
Low-Volume	106	70	.7

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports, and information from Office of the Director, Florida State Markets, Winter Haven, Florida.

volume markets average 0.7 carlot equivalent per day. In a United States Department of Agriculture study of vegetable markets, it was stated "that the daily volume of sales is more important than the annual volume of sales." It also stated that the per market average volume per day was 8.6 carlot equivalents. The larger-volume markets handled 23.4 carlot equivalents per day and the smallest-volume markets handled 1.8 carlot equivalents per day.⁵

Kind and Quantity of Vegetables in Market Areas

The production of vegetables in an area extending for 20 miles around each of the high-volume and low-volume markets was estimated as nearly as possible from county production figures. Average annual production of vegetables per market area for high-volume and low-volume markets, from 1956 through 1960, is shown in Table 86. County acreages by items did not coincide, in all cases, with market areas, but the results were a good approximation of the kind and quantity of vegetables produced in the market areas.

High-volume markets had a wide variety of vegetables produced in their market areas. Tomatoes, snap beans, potatoes, peppers, cabbage, celery, cucumbers, squash, sweet corn, and eggplant were the most important items grown and

⁵Ibid., pp. 35-36.

TABLE 86.--Kind and quantity of vegetables produced in market areas for high-volume and low-volume state markets compared with the kind and quantity of vegetables handled, 1955-56 to 1959-60 seasons

Items	High-Volume	
	Average Volume Produced and Sold per Market Area	Average Volume Reported Handled per Market
	(Carlot Equivalents)	(Carlot Equivalents)
Beans, Lima	10	7
Beans, snap	1,138	693
Cabbage	435	269
Celery	362	70
Corn, sweet	219	134
Cucumbers	235	343
Eggplant	190	173
Endive and escarole	10	14
Lettuce	62	27
Peppers	624	640
Potatoes, Irish	786	37
Radishes	58	6
Squash	226	155
Strawberries	23	.
Tomatoes	2,212	971
Watermelons	32	5
Bunched vegetables	16	7
Other vegetables	40	38
Total	6,698	3,589

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports; and Florida, State Marketing Bureau, Annual Agricultural Statistical Summary.

TABLE 86.--Extension

Markets	Low-Volume Markets		
Per Cent of Supplies through State Markets	Average Volume Produced and Sold per Market Area	Average Volume Reported Handled per Market	Per Cent of Supplies through State Markets
(Per Cent)	(Carlot Equivalents)	(Carlot Equivalents)	(Per Cent)
70	9	3	33
61	5	18	360
59	12	3	25
19	. .	. .	0
61	4	6	150
146	29	8	28
91	3	0	0
140	. .	. .	0
44	. .	. .	0
103	11	5	45
5	19	9	47
10	. .	. .	0
69	13	2	15
0	9	5	55
44	2	. .	0
16	185	5	3
44	1	. .	0
95	2	6	300
54	304	70	23

harvested in the average high-volume market area.

A volume equivalent to over one-half of the average annual production in its market area was reported handled by the average market in the high-volume group. Seventeen vegetable items were recorded in carlot quantities. The items that were handled in large volume at state markets were the most important items produced in the market areas. Strawberries were the only product grown in the average high-volume market area which were not included in state market sales reports. Sizeable volumes of cucumbers, endive-escarole, and peppers, that had been produced outside of the 20-mile market area range, were brought to high-volume markets for sale. Average quantities of each of these items reported per market were greater than the amounts grown in the market area.

Low-volume markets also had a wide variety of vegetable items produced in the average market area. But total production per market area per year in this group was only 304 carlot equivalents, as compared to 3,589 for the high-volume market areas. The low-volume markets had less than 5 per cent of the sales potential that was available to the high-volume markets.

Eleven vegetable items out of the 18 for which figures are available were reported handled at the average low-

volume market. But these markets averaged only 70 carlot equivalents per year, or less than one-fourth of the available supplies in their market areas. This compares with over half for high-volume markets. The average high-volume market had sales more than 50 times as great as the average low-volume market.

Important items at the low-volume markets included only 7 of the 17 important items sold at the high-volume markets. Celery, eggplant, and tomatoes were not reported by low-volume markets in carlot quantities. Celery was not produced in the market areas of these markets. Lima beans, strawberries, and watermelons were among the important items at low-volume markets.

Another study reported that the major items handled at shipping-point vegetable markets were: Beans, tomatoes, peppers, sweet potatoes, and sweet corn.⁶ The same study also reported that 22.3 per cent of the total production in market areas was sold on shipping-point markets. However, in summary, it reported "there was no significant relationship between the geographical size of the production area or the size of the market and the percentage of the area's production handled on the market in the areas."⁷

⁶Ibid., p. 11.

⁷Ibid., pp. 39-41.

Number and Size of Farms in Market Areas

The number of farms and the farms reporting vegetables harvested for sale per market area were determined for the high-volume and low-volume state vegetable markets. Average farm size and average vegetable acreage were also calculated for each group. The high-volume market areas averaged 706 farms of all kinds, with an average size of 257 acres. They had 99 vegetable farms per market area and 155 acres of vegetables per vegetable farm (Table 87). The low-volume markets had 788 farms per market area and 232 acres per farm. This group had 97 vegetable farms per market area and 17 acres of vegetables per farm.

In the high-volume market areas, 14 per cent of the farms harvested vegetables for sale and 8 per cent of the farm land was in vegetables. In low-volume market areas, 12 per cent of the farms harvested vegetables for sale and 1 per cent of the farm land was in vegetables.

Vegetable production Density in Market Areas

Another method of evaluating vegetable market areas is to consider the size of the farms and the intensity of the vegetable production in the 20-mile area around the markets. A report, published recently, classified each

TABLE 87.--Number and size of farms and the number and size of vegetable farms in the market areas of high-volume and low-volume state vegetable markets in 1959

	Market Classification	
	High-Volume	Low-Volume
Average number of farms per market area	706	788
Average acreage of farms	257	232
Number of farms reporting vegetables per market area	99	97
Average acreage of vegetables	155	17
Percentage of farms reporting vegetables	14	12
Percentage of farm acreage in vegetables	8	1

Source: Calculated from U. S., Department of Commerce, Bureau of Census, United States Census of Agriculture, 1960.

county in the southeastern United States according to its vegetable production density and size of vegetable farms. This study also used a 20-mile radius as the market area. County classifications from this report were applied to the state vegetable markets' high- and low-volume groups. All of the high-volume markets were in areas classified as high-density, large-farm areas. From the low-volume group, three markets were in high-density, small-farm areas and the other (Bonifay) was in an area classified as "non-vegetable."⁸

Importance of Various Market Areas
as a Source for Terminal Market Supplies

The important Florida vegetable items unloaded in 38 major United States cities and the proportion of each item which came from Florida during peak harvesting periods in the state are presented in Table 88. This table also contains the three Florida counties that usually reported the largest shipments of each item. This information shows the importance of certain Florida counties in furnishing national supplies of various vegetables. It also indicates that certain state

⁸North Carolina State College, Vegetable Market Structure Classes in the South-east, A. E. Information Service No. 35 (Raleigh, North Carolina, 1954), pp. 2-5.

TABLE 88.--Important Florida vegetables, with the proportion of each unloaded in major United States cities during certain seasons of the year, and the counties with highest shipping volume, 1958 to 1961

Item	Minimum Proportion from Florida
	(Per cent)
Beans	75
Cabbage	50
Celery	40
Corn, sweet	90
Cucumbers	75
Eggplant	75
Endive-escarole	75
Peppers	75
Potatoes, Irish (new)	90
Radishes	45
Squash	40
Strawberries	90
Tomatoes	50
Watermelons	50

Sources: Agricultural Extension Service, University of Florida, Florida Vegetables, 1961-62 Acreage-Marketing Guide (Gainesville, Florida, 1961, Mimeographed); and U. S., Department of Agriculture, Florida Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1958-61.

TABLE 88.--Extension

Months When Proportion of Unloads from Florida Are Highest ^a	Three Most Important Counties in Shipments
December through April	Broward, Palm Beach, and Dade
March and April	St. Johns, Seminole, and Palm Beach
February through May	Palm Beach, Seminole, and Lake
December through April	Palm Beach, Orange, and Broward
November, December, March through May	Broward, Hardee, and Palm Beach
December through May	Broward, Palm Beach, and Hillsborough
December through May	Palm Beach, Orange, and Broward
January through May	Broward, Palm Beach, and Hillsborough
January, February, and March	Palm Beach, Dade, and Lee
November through April	Palm Beach, Orange, and Broward
December through April	Broward, Palm Beach, and Hillsborough
January and February	Hillsborough, Dade, and Bradford
January through May	Dade, Palm Beach, and St. Lucie
April, May, and June	Collier, Marion, and Alachua

^aUnloads in 38 major cities.

market areas were principal sources of national supplies during certain periods of the year.

Eleven of Florida's 14 important vegetable products, listed in Table 88, comprised 50 per cent or more of the supplies of those products unloaded, during the 1958-61 period, in the major cities for two or more months of each year. Celery and squash from Florida reached 40 per cent or more of the major city unloads for at least three months of the year, and radishes from Florida furnished a minimum of 45 per cent of the major city unloads for about five months of the year. Sweet corn, new Irish potatoes, and strawberries from Florida made up 90 per cent or more of the major city unloads of those items for brief periods.

One or more of the high-volume state vegetable markets were located in the "principal-three-counties" production areas for each vegetable item shown in Table 88 except watermelons. Only one low-volume state vegetable market was located in any of the "principal-three-county" production areas for important Florida vegetables. This market was Starke in Bradford County and the product was strawberries. With the exception of Starke for strawberries, none of the low-volume state vegetable markets had any vegetable items in their areas with large enough quantities to be significant from a national supply standpoint.

Facilities

Market facilities are as important to the success of a market as the facilities in the area for transportation, communication, packing-house supplies, motels, and restaurants. However, market facilities, if provided, should be both needed and useful.

As a measure of the extent that state market facilities were utilized, income of the high- and low-volume state vegetable markets was classified and analyzed. High-volume markets on the average received 32 per cent of their income from package fees, 23 per cent from platform rental, 19 per cent from packing-house rental, 12 per cent from office space rental, 5 per cent from truck registrations, 3 per cent from service station rental, 2 per cent from truck scale fees, 2 per cent from restaurant rental, 1 per cent from commissions on telephone and telegraph service, and 1 per cent from miscellaneous sources (Table 89). These markets also had minor income from ground rental and machinery and equipment rental, but the amount of each was less than 0.5 per cent of total income. The average annual income of high-volume markets was \$43,074 per market during the last five years.

Low-volume markets received an average of 60 per cent of their income from package fees. They had no communication

TABLE 89.--Sources of income for high-volume and low-volume state vegetable markets, average per year, 1955-56 to 1959-60 seasons

Source of Income	High-Volume		Low-Volume	
	Average Income per Market per Year	Per Cent of Total	Average Income per Market per Year	Per Cent of Total
	(Dollars)		(Dollars)	
COMMISSIONS:				
Telephone and telegraph	284.09	1	. .	0
FEES:				
Packages	13,909.91	32	2,047.68	60
Truck registrations	2,266.33	5	. .	0
Truck scales	988.26	2	4.29	a
RENTALS:				
Ground	89.97	a	165.93	5
Machinery and equipment	14.67	a	256.38	8
Office	5,067.85	12	36.45	1
Packing house	8,076.23	19	426.42	12
Platform	10,043.89	23	244.92	7
Restaurant	652.77	2	. .	0
Service station	1,126.80	3	96.02	3
OTHER	553.39	1	148.18	4
Total	43,074.16	100	3,426.27	100

Source: Calculated from Florida, State Agricultural Marketing Board, Annual Reports.

^aLess than .5 per cent.

commissions, no truck registration fees, and no restaurant rentals. Truck scale fees were less than 0.5 per cent of income. The average income of low-volume markets amounted to \$3,426 per market per year for the last five years.

The type of market facilities available for the two groups of markets appears to be identical except there were no restaurants at the low-volume markets. No income was reported by the low-volume markets from the use of communications, but it is certain that telephone and telegraph service was available. Neither was income reported for truck registrations, but trucks undoubtedly hauled most of the produce handled.

Amount of business at the low-volume markets was much too small to give market management equal opportunity for deriving income from as many sources as did the managers of high-volume markets.

Management

Although management has been studied, discussed, and written about in great detail, it is still one of the most intangible factors affecting market success. Everyone knows it is a very important factor, but it is very difficult to measure or describe. Market management is not a job to which

just anyone can be assigned with satisfactory results. Volume is the key to a market's success, but management can be the key to volume.

Market management, according to a United States Department of Agriculture study, must "give consideration to the interests of all groups concerned, does not put into effect rules and regulations that may jeopardize free trading between buyers and sellers, and does not discriminate against produce because of its state of origin or method of transportation." This study also lists good management characteristics as follows:

1. A market manager with the ability to arbitrate disputes between buyers and sellers fairly and impartially, and an understanding of the basic principles of marketing, and the ability to encourage buyers and sellers to use the facility.
2. The development and enforcement of a traffic control plan to keep market traffic moving smoothly with a minimum of congestion and delays.
3. The development of a good reputation on the part of the market as a whole for high standards of trading and for quality produce.

An additional list in the same study presents management decisions that could cause a market to lose business or fail, as follows:

1. Failure of the manager to arbitrate buyer and seller disputes when necessary or showing partiality in settling them.
2. The promulgation and enforcement of rules and regulations that retard or prohibit free trading between buyers and sellers or restrictions that may give one type of buyer advantages over other types.
3. Failure on the part of the management to encourage buyers to visit the market, particularly during periods of surplus production.⁹

Another United States Department of Agriculture bulletin on the subject of produce markets defines the activities and duties of market management in the following manner:

As a matter of policy, the market organization itself does not engage in the buying or selling of produce or in any other type of business that would be in competition with the market tenants. Generally speaking, the markets' sources of income are limited to rentals and fees for the use of market facilities, services to market users, and the sale of utilities and supplies to market tenants.

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Specifically, some of the duties (not listed in order of importance) are:

1. Prepare rules and regulations which govern the transactions of business within the market.
2. Develop and enforce a traffic control plan to keep market traffic moving smoothly with a minimum of congestion and delay.
3. Prepare and execute rental and lease agreements with people who operate facilities on the market.

⁹U. S., Department of Agriculture, Farmers' Produce , p. 60.

4. Settle disputes that might arise between buyers and sellers, fairly and impartially.
5. Promote good public relations with the community in which the market is established.
6. Obtain and develop information relative to markets and market conditions for the products handled and furnish this information to market patrons.
7. Help the trade move produce in an efficient and orderly manner, and encourage buyers to visit the market.
8. See that the market facilities are kept in good repair.
9. Determine whether expansion of facilities is in the interest of the market.
10. Make periodical financial reports to the director.
11. Make recommendations to the director regarding anything that can be done to improve the market.
12. See that high market standards and ethics are maintained on the market.
13. Maintain contacts with other markets so that ideas can be exchanged which are mutually beneficial.
14. Check fees and rentals and determine what these charges should be.
15. Exercise police powers in the interest of the market.
16. Supervise personnel in carrying out the operations of the market.
17. Hire or discharge market employees.
18. Order the removal from the market of any products deemed by him to be unwholesome or unfit for human consumption.

19. Suspend any lease or license as a penalty for the violation of any provisions of the rules and regulations by any lessee or licensee or his agent.
20. Negotiate labor contracts for the market management or for tenants on the market.¹⁰

The degree of effectiveness with which state vegetable market managers were able to serve the patrons who used the markets must be at least partially reflected in the performance records of their respective markets. Volume can offset a multitude of errors. With low volume, the need for management skills is intensified. High-volume state markets handled more than one-half of the vegetable supplies produced in their market areas. Low-volume state markets handled less than one-fourth of their potential supplies. Grower attitudes and preferences may explain part of this difference. Management may account for part of it also.

Income at high-volume state markets was received in descending order of importance from package fees, platform rentals, and packing-house rentals. These are the same sources in order of importance reported in United States Department of Agriculture bulletins on produce markets.¹¹

¹⁰U. S., Department of Agriculture, Wholesale Produce Markets, Market Research Report No. 91 (Washington: U. S. Government Printing Office, 1955), pp. 34, 35, and 67.

¹¹Ibid., p. 17.

Income at low-volume state vegetable markets came from package fees, packing-house rentals, and machine and equipment rentals in that order.

Management influences on the proportion of available supplies brought to state markets should not be treated lightly. Sources and distribution of market income may be a guide to the degree of fairness market managers exhibit to buyers and sellers.

In summarizing the factors contributing to success or failure of vegetable markets, one of the United States Department of Agriculture reports had the following to say about factors of success:

The volume of fruit and vegetables sold daily . . . is the most important factor in the success of a shipping point market. Although there are a number of other factors that affect the success or failure of a market, such as quantity of fruits and vegetables produced in the area served by the market, number and type of growers selling on the market, and number of buyers patronizing the market, all are closely related to the volume sold.

There appears to be little likelihood of a shipping point market failing after it has established a reputation for handling a relatively large quantity of produce. Factors such as poor management, improper facilities, or poor location can have a detrimental effect upon a market's success, but these factors are more likely to result in the failure of a small market than a large one.¹²

¹²U. S., Department of Agriculture, Farmers' Produce . . . , p. 60.

It appears that volume handled is the state vegetable market's most important factor of success, but it must be considered in relation to the conditions that make suitable quantities of vegetables available. Volume per day is more important than volume per season.

CHAPTER VII

ANALYSIS OF SELECTED MARKETS

In order to learn something of the impact which state vegetable markets have had on their respective areas, two markets were selected for detailed study. One of these markets was located at Pompano and the other at Starke. They represent the extremes in operational performance.

The period of operation, annual operating results, annual dollar and physical volume of each product handled were presented for both markets in Chapter V. The market at Pompano was one of the four markets in the high-volume market analysis of Chapter VI and the market at Starke was among the four markets in the low-volume group.

Detailed descriptions of the areas served by these two markets are given in this chapter. Also the quantities of vegetable products produced in the areas served and the proportion handled by the markets. The results of a survey of growers in each market area covering their use and opinions of the state markets are included, as are the results of an opinion survey of buyers who patronized each

market. The schedules used with growers and buyers are included in Appendix pages 422 to 427.

The survey of growers was conducted during the spring of 1960 and that of buyers during the winter and spring of 1961. Methods and techniques of sampling were described in Chapter I.

Pompano State Farmers' Market

The Pompano State Farmers' Market is located in the city of Pompano Beach, Florida, which lies about halfway between Miami and West Palm Beach near the coastline of the Atlantic Ocean. The Pompano vegetable area is in one of the best protected areas in Florida against cold and frost damage. Climatic conditions are quite conducive to the growing of tender vegetables during the winter and early spring. The Pompano state market is also within 60 miles of other concentrated winter vegetable areas in south Dade County and at the southern edge of Lake Okeechobee, where large quantities of the more hardy vegetables are grown.

Vegetable Production in the Pompano Area

Vegetable production in the Pompano area (Broward and east Palm Beach Counties) has had a prolonged, relatively

rapid rate of growth. It is difficult to determine when the vegetable industry first became significant in the Pompano area because of inconsistencies in the available information. Census data give some county vegetable information with each decennial report; but, prior to 1925, county political designations were unstable and data for this particular area are unavailable.

The trends taking place in vegetable production in part of the Pompano area are presented in Table 90. The number of farms and farm acreage of Broward County are used along with the vegetable acreage and number of farms reporting vegetables harvested for sale. Figures for east Palm Beach County, which is part of the Pompano area, are not given because they could not be separated from those for the larger Lake Okeechobee area in the western part of the county. Census figures for the entire county would be inappropriate to describe the Pompano area.

It has been previously pointed out that the most rapid acreage expansion of vegetables for Florida as a whole came during the decade of the 1920's. But the most rapid expansion in the southern portion of the state came in the decade of the 1930's. Broward County had a sizeable acreage increase in the 1920's, but a much larger increase in the

TABLE 90.--Number, acreage, and size of all farms and vegetable farms, Broward County, by decades, 1919-59

	1919	1929	1939	1949	1959
ALL FARMS:					
Number	280	938	946	423	381
Total Acreage	20,400	24,139	77,559	139,235	80,821
Average size	72.9	25.7	82.0	392.2	212.1
VEGETABLE FARMS:					
Number	^a	859	743	204	49
Total acreage	3,703	9,998	19,863	28,261	7,445
Average size	^a	11.6	26.7	138.5	151.9
Percentage of farms reporting vegetables					
	^a	92	79	48	13
Percentage of farm land in vegetables					
	18	43	26	20	9

Source: U. S., Department of Commerce, Bureau of Census, United States Census of Agriculture, 1920-60.

^aNot available.

1930's with the acreage increasing at a rapid rate through the 1940's. Since 1949, acres of vegetables in Broward County have decreased and 7,445 acres were reported for 1959.

There has been a tendency for vegetable production in this county to be concentrated into fewer hands as production units became larger. The number of vegetable farms has been decreasing since 1929. The proportion of farms growing vegetables for sale and the proportion of farm acreage in vegetables has also been decreasing. The per cent of farms reporting vegetables decreased from 90 per cent in 1929 to 13 per cent in 1959. The per cent of farm acreage in vegetables decreased from 43 per cent to 9 per cent during the same period.

More detailed information on acreage and production of vegetables in the Pompano state market area from 1951 through 1960 is presented in Table 91. This material covers Broward County and east Palm Beach County. It suggests that east Palm Beach County is gaining much of the vegetable acreage lost by Broward, and is producing most of the vegetables in that area.

TABLE 91.--Acreage and production of vegetables in the Pompano State Farmers' Market area, by seasons, 1951-60^a

Season Ending in June	Snap Beans	Sweet Corn	Cucum- bers	Egg- plant
				<u>Areas</u>
1951	37,400	750	955	550
1952	33,200	2,250	750	1,000
1953	25,500	2,750	975	990
1954	26,400	2,800	825	870
1955	26,100	1,700	1,550	940
1956	24,400	2,080	2,225	1,330
1957	21,600	2,850	2,760	1,410
1958	20,200	3,275	2,850	1,325
1959	19,250	1,850	3,350	1,485
1960	21,300	950	2,980	1,550
				<u>Production in</u>
1951	4,785	171	227	440
1952	4,281	558	358	820
1953	3,964	628	391	639
1954	4,359	845	350	652
1955	4,173	726	544	715
1956	3,748	570	698	826
1957	3,246	868	887	886
1958	2,139	549	690	473
1959	2,314	348	717	787
1960	2,759	208	518	756

Source: U. S., Department of Agriculture, Florida Crop and Livestock Reporting Service, Florida Vegetable Crops, Annual Statistical Summaries, 1951-60.

^aBroward County and east Palm Beach County.

TABLE 91.--Extension

Pepper	Squash	Tomatoes	Others	Total
<u>Harvested</u>				
3,550	3,600	850	1,375	49,030
4,175	4,500	1,575	675	48,125
5,625	3,700	2,050	1,505	43,095
4,275	3,300	2,500	950	41,920
4,675	4,275	2,100	1,335	42,675
5,400	4,850	2,650	1,700	44,635
6,100	3,900	2,460	565	41,645
4,825	3,300	2,730	865	39,370
6,550	3,600	2,520	640	39,245
5,225	4,100	2,560	525	39,190
<u>Carlot Equivalents</u>				
2,916	782	475	160	9,960
2,732	498	541	179	9,967
2,521	534	632	272	9,581
2,517	630	861	200	10,414
3,228	903	1,196	365	11,850
3,600	917	1,304	567	12,230
2,889	646	1,113	98	10,633
1,509	488	893	163	6,904
2,672	398	1,353	95	8,684
2,643	690	2,103	116	9,793

Important items.--Some of the major items for which the Pompano area is important are beans, peppers, vine-ripened tomatoes, eggplant, cucumbers, squash, and sweet corn (Table 92).¹ All items are sensitive to cold weather, but they generally grow in the Pompano area through the winter and early spring over a five- to seven-month period.

Proportion of area vegetables sold at state market.--The state market at Pompano handles a large proportion of most of the major items produced in the area. Cucumbers, potatoes, and other items are frequently brought to the Pompano market for sale from production areas outside the 20-mile radius of the market. This is the explanation given by market personnel as to how the market could handle larger quantities of certain items than were produced locally. Of the vegetables produced in the area, 80 per cent were reported handled by the state market. No watermelons, strawberries, or bunch items were reported.

An average of 40 carlot equivalents of vegetables was handled per day of market operation for the five seasons from 1956 to 1960. This is based on a seven-month annual

¹The figures on production of these items are based on the quantities harvested in Broward County and east Palm Beach County. They are not derived from the Census, but from Florida Crop Reporting Service data.

TABLE 92.--Vegetable production by items in the Pompano area and quantities sold at the State Farmers' Market, average for five seasons, 1955-56 through 1959-60

Item	Production	Sold at State Market	Proportion of Sup- plies through State Market
	(Carlot equivalents)	(Carlot equivalents)	(Per cent)
Beans, Lima	431	25	6
Beans, snap	2,825	2,775	98
Cabbage	8	7	88
Corn, sweet	568	323	57
Cucumbers	702	1,263	180 ^a
Eggplant	746	680	91
Lettuce	245	2	1
Peppers	2,663	2,489	93
Potatoes, Irish	48	52	108 ^b
Squash	628	574	91
Strawberries	7	. .	0
Tomatoes	1,327	212	16
Watermelons	215	. .	0
Bunch vegetables	13	. .	0
Other vegetables	124	63	51
Total	10,550	8,466	80

Sources: Florida, State Marketing Bureau, Annual Agricultural Statistical Summary, 1956-60; and Florida, State Agricultural Marketing Board, Annual Reports, 1956-60.

^aA large volume of imported cucumbers from offshore islands, and some from other areas of Florida, are sold at the Pompano market.

^bSome Irish potatoes produced in other areas are sold at the Pompano market.

operating period, with an average of 8,466 carlot equivalents handled per season.

Market Facilities

State market facilities at Pompano consist of a large covered sales platform approximately 1,100 feet by 100 feet, a large administration building, extensive truck parking lots, a market restaurant, and ample rest room facilities with showers. The administration building includes about 30 offices for buyers and market personnel, a restaurant, telegraph-telephone center, and a public address system. Truckers frequently use the Pompano market as their point of contact when they are away from home. They know they can live in their trucks parked in the market parking lot and always be within easy reach by telephone through the market's public address system. For this service and convenience, truckers are required to register and pay a fee upon arrival at the market. After loading or upon departure from the market, one-half of the trucker's registration fee is returned in exchange for a copy of the load manifest. It is from these load manifests that the market manager determines the kind and quantity of goods handled at the market for the season.

Most buyers using the market have office space

rented in the administration building. Most growers rent space on the platform either as individuals or in groups and then authorize a selling broker to act as their sales agent and use the space they have rented. Usually these selling brokers are permitted to sell products of other growers as well as the products of the growers who rent the platform space. Growers are reimbursed by brokers for platform space rentals. The selling brokers thus become one-season agents of the grower or growers they represent. Each year, platform space locations are determined by numbers drawn from a hat.

Methods of Operation

Typical trading practices on the Pompano market are for selling brokers to receive vegetables direct from the field to their platform space. They prefer to have samples of the day's harvest delivered early in the morning, accompanied by an estimate of quantity to be harvested, in order to facilitate advance sales arrangements. A receipt is given for the merchandise when it is unloaded. As growers harvest and send their products to the market, the selling brokers frequently have their entire platform space crowded with merchandise.

Buyers try to keep informed on quantities and conditions of each item available from the selling brokers at all times. They also must stay near telephones in order to receive their purchase requirements from their accounts. Most buyers place their orders with selling brokers as soon as their requirements are known. Sometimes buyers pay cash and take possession of the goods immediately, but many times their orders are only reservations for a specific amount of various items which will meet certain conditions. These reservations are called for later in the day as shipping schedules are arranged, and are not considered enforceable agreements. It is understood that the price will be "the top-of-the-market-for-the-day." This method of reserving items for later pickup at an unspecified price is commonly referred to as "booking."

Booking is convenient for selling brokers and for buyers. Brokers like to have commitments for merchandise as fast as it comes in and buyers like the assurance that their requirements will be met at time of loading. The booking arrangement is a "gentlemen's agreement," but can be and frequently is broken by either party who cannot or will not live up to his word. Sometimes the brokers or buyers unintentionally overcommit themselves and have to "throw over"

the booking agreement because of conditions beyond their control.

At the end of the trading day, brokers and buyers survey the rate of movement, quantities handled, how well supplies were cleaned up, and typical price trends of cash sales. It is at this point that "top-of-the-market" price is established for all merchandise reserved for pickup without a price commitment. If supplies of some items have not been cleaned up by late at night, dealers who ship on consignment for speculation purposes try to buy leftovers on a low-price basis.

Selling brokers perform their services for a flat fee per container and make their income from quantities handled and not from sales values recorded. Generally no federal inspection is performed at the market and merchandise is sold on a "see-it-and-buy-it" or "buyer-beware" basis. Neither brokers nor buyers can look at all merchandise handled and growers' reputation for pack plays a large part in trading decisions. Dumping privileges for inspection by buyers before purchase are frowned upon and no facilities are available for this purpose.

One small vegetable marketing cooperative operates on the market. It rents platform space and hires a manager

who competes with selling brokers in selling the products of the members.

Sales, Income, and Expenses

Sales at the Pompano market averaged \$19,590,946 per season from 1956 to 1960 (Table 93). Income was \$56,126

TABLE 93.--Important operating figures for the Pompano State Farmers' Market, average for five seasons, 1955-56 through 1959-60

Item	Average per Season
Sales	\$19,590,946
Income	56,126
Expenses	45,297
Profit	10,829
Personnel expenses	27,145
Fixed assets	430,808

per season and operating profits, \$10,829. Fixed assets for the five-season period averaged \$430,808.

Annual sales per dollar of fixed assets were \$45.47 during the five-season period. Income was .2 per cent of sales and operating profit, 19 per cent of income. Personnel expenses were 48 per cent of income.

Market income, as a cost of doing business to market users, amounted to \$6.63 per carlot equivalent of vegetables handled for the five-season period.

Management Opinions Regarding
Market Operation and Practices

Operating procedures of the Pompano market are designed to encourage freedom of trade between growers and their selling brokers, selling brokers and buyers, or between growers and buyers. It does not enter into nor interfere with negotiations for labor or fees connected with the handling of products on the market. Management policy is one of attempting to prevent any group from gaining a dominating influence over any other group on the market. It is felt by the management that, although everyone cannot always be satisfied, the freedom of trade and negotiation maintained is the main factor that keeps the market strong.

General rules and regulations governing market activities come from the Director of State Markets,² but they authorize the market manager to add such local rules and regulations as may be necessary.

²A copy of these is included as Appendix pages 417 and 420.

Market advisory committee.--The general rules and regulations specifically state that "the market manager may or may not choose an advisory committee to aid him in making decisions for the betterment of the market." It is stated that if such a committee is chosen, it is to have no "legal status" but will act only in an advisory capacity. If an advisory committee is chosen, it is to be hand-picked by the market manager and will become defunct when the market management changes. Members of an advisory committee, if one is selected, must be active growers who are currently using the market. Local County Agricultural Agents may be invited to become ex-officio members.

No advisory committee is being used by the market manager at Pompano and none has been used for several years. The manager feels that improved public relations and other potential benefits which might be gained from an advisory committee are outweighed by the confusion, jealousy, and misunderstandings associated with the use of such a committee.

Packing houses.--A few packing houses have been built adjacent to the market; and produce handlers who operate these houses are acting as direct sales agents in competition with the state market. The market management feels that packing-house sales departments nearby, but off the market, are not

serious competition to the market because some items need packing-house preparation prior to shipment. Management believes it is better to have the packing houses adjacent to the state market so buyers and truckers can see and assemble a complete line of area products in a centralized location. It is felt that the Pompano market is improved by having all handling facilities, sales agents, buyers, and commodities located in one small area. Market management feels that, because of competition, growers who use the state market should not be penalized by having to pay a package fee when they can receive the same price at nearby outlets without paying a fee. Management also believes that, if state market regulations materially interfered with buyers in their normal conduct of business, they would simply open a purchasing office at a nearby platform and operate from there without state market regulatory influence. For these reasons there are no package fees paid by growers, and buyers are subject to no interference from market personnel.

Some selling brokers who handle mostly "offshore"-produced items, and a few buyers, are already operating in facilities adjacent to the state market. Naturally, some growers sell to these handlers operating off the market premises.

Merchandising.--The manager feels that a successful large-volume market such as Pompano has the problem of not keeping closely in touch with enough food distribution organizations, many of which buy directly from production areas. He feels the need for a produce merchandising man to contact commercial food distributors throughout the nation to keep them informed of product availability, seasonal trends, advantages and convenience of direct purchases. He also feels that the availability of tender vegetables at Pompano, hardy vegetables at Belle Glade, and citrus items further north provides an opportunity of mixed-load truck hauling that many food distributors fail to use to the best advantage. The market manager says that food stores could have nearly a complete line of fresh-produce items, in proper volume proportions, moving directly to point of final sale at all times during the winter season. They could have it arrive much fresher than would be possible if it had to be warehoused in and reshipped from food distribution centers.

Grower Use and Image of Market

Market management of the Pompano State Farmers' Market has ample evidence in the operating results of the market to verify its position and attitude on operating procedure and policies. Much of the market's success has been

a product of area development and some has been the result of management influence.

In spite of the market's excellent record, an inquiry into the growers' feelings and attitudes indicates that the market's public relations with growers are poor. Opinions of the market operations and the present method of sales are causing considerable unrest among growers, who definitely feel that they receive no sympathy from management. There is evidence that some are seeking alternative outlets for more satisfactory sales of their products.

Growers surveyed and market use.--The survey in the Pompano area involved 25 grower interviews. They had grown vegetables from three to 49 years and averaged 13 years. Acreage of vegetables grown ranged from a small hydroponics operation to 2,000 acres, and averaged 440 acres. The various crops grown, the number of growers reporting each crop, and the proportion in the survey reporting each crop are presented in Table 94.

In spite of the impressive record of the market's importance to the area, only 52 per cent of the growers interviewed took their total vegetable production to the Pompano state market. Twelve per cent of the growers interviewed took none of their production there (Table 95).

TABLE 94.--Vegetable crops grown by 25 growers interviewed in the Pompano State Farmers' Market area and the number of growers raising each crop during the 1959-60 season

Crop	Number of Growers	Proportion Raising Crop
		(Per cent)
Beans, Lima	3	12
Beans, snap	14	56
Cabbage	1	4
Cucumbers	5	20
Eggplant	11	44
Peppers	15	60
Potatoes, Irish	1	4
Squash	9	36
Strawberries	1	4
Tomatoes	6	24
Other vegetables	6	24

TABLE 95.--Use of the Pompano State Farmers' Market by vegetable growers interviewed, 25 growers, 1959-60 season

Extent of Use	Grower Replies		Acreage of Vegetables per Grower
	Number	Per Cent	
Total production	13	52	280
Part of production	9	36	738
No sales	3	12	244
Total	25	100	. .

Of the three growers interviewed who were not using the state market, two had used it in the past and would do so again if they could sell for cash upon arrival at the market. This group of growers had sought other sales outlets either because there was no market price and no cash offer during the day or no demand for certain specialty items (Table 96). They were satisfied with their present marketing practices. One grower, who has a specialty product, sells through dealers in selected cities on an exclusive basis and would not consider using the Pompano market at this time.

Grower attitudes toward market.--All growers interviewed were familiar with and willing to discuss the Pompano State Market. Twenty-four of the growers interviewed said they had heard other growers in the area discuss the market, and opinions expressed were similar to their own.

Growers have apparently developed attitudes toward certain procedures and market operations that could prove detrimental to future progress of the Pompano state market. In general, they have a feeling that most buyers patronizing the state market were members of a buyers' association which was formed for the primary purpose of having the market operated in a manner best suited to their convenience

TABLE 96.--Vegetable growers in the Pompano area who were not using the State Farmers' Market at time of interview, 3 growers out of 25 interviewed, 1959-60 season

Item	Grower Replies	
	Number	Per Cent
<u>Affirmative answers to questions</u>		
Will you discuss reasons for not using state markets?	3	100
If suitable changes were made in operations, would you use the state market?	2	67
Have you ever used the state market? ^a	2	67
<u>Reasons for not using market</u>		
Have established exclusive dealers in major distribution centers to handle name brand vine-ripened tomatoes and they take total production.	1	. .
Specialty product grower sends total production to major distribution center agents and sells everything.	1	. .
Better prices and marketing procedures are available in another location where direct negotiations with buyers is fairer and payment faster.	1	. .
<u>Changes suggested to make market operation acceptable</u>		
Assurance of sales for all products every trip to market at prices equal to or better than commission sales.	1	. .
An auction system similar to tobacco sales, with buyers and auctioneer going from stall to stall.	1	. .

^aBoth growers stated they were better satisfied with sales through their present outlets than they had been with the state market.

and interest. The growers referred to the Pompano market as a "buyers'" market and not a farmers'" market (Table 97). They felt that the market was being operated in a manner which caused them to receive lower prices for their produce than was warranted by market conditions. They maintained that booking was costly, inconvenient, and wasteful because they had to make an unnecessary trip to market and had no opportunity to make marketing decisions based on early market prices. The growers preferred cash sales upon arrival at the market so that marketing could be planned intelligently. Such a practice would give growers an opportunity to save money by discontinuing the harvesting operation if prices were below the costs of harvesting.

Bean growers representing 75 per cent of the bean acreage in the area have attempted and failed to stop the practice of early morning booking by selling brokers. Their initial effort, to prevail upon market management to intervene, failed because of management's policy of noninterference. Management maintained that it had contracts with buyers and sellers on the market and could not tell them how to operate. As a last resort, the growers prepared petitions for each selling broker and each buyer which made the grower's position clear. The petitions were signed by

TABLE 97.--Response to question: "What do you think of the Pompano State Farmers' Market Operations?"; 25 growers, Pompano area, 1959-60 season

Item	Grower Replies	
	Number	Per Cent
<u>Rating</u>		
Excellent	2	8
Good	8	32
Fair	10	40
Poor	5	20
Total	25	100
<u>Important reasons why growers felt as they did^a</u>		
It is a buyers' market and not a farmers' market. They buyers are well organized, work closely with the selling brokers and dominate market methods, policies, and prices. They insist on the booking method of sales, which creates many problems and hardships for growers as well as destroys all faith in the pricing structure.	15	..
Greater distribution and more buyers are needed.	3	..
Harvesting must be carried on daily, but buyers want goods only on Monday, Thursday, and Friday. On off days, many buyers want nothing and prices fall very low.	2	..
There is dependable demand for premium or specialty items.	2	..
All growers get average prices regardless of grade or condition. No prices by grades or condition are published, but buyers represent everything they ship as top grade.	2	..
Farm-to-retail margins are too great.	2	..

^aSome growers gave more than one reason.

all growers supporting the no-booking action (see Appendix pages 428 to 434). Booking was halted temporarily but there were no enforcement measures and it returned as a regular method of sale.

The question of lack of representation in management decisions was another matter irritating to growers. Eighty-four per cent of them felt that they should select their own committee to work with management and that growers should exert some influence over operating methods and policies (Table 98). They felt that the produce buyers

TABLE 98.--Opinions of vegetable growers in the Pompano area concerning a farmers' advisory committee to work on problems with the manager of the State Farmers' Market; 25 growers, 1959-60 season

Opinions	Number of Growers	Proportion of Growers
		(Per cent)
Advisory committee should be selected by farmers to speak for them and should have some influence over operating policies.	21	84
Advisory committee is not necessary because farmers cannot get together or do not understand market operation.	4	16
Total	25	100

influenced market decisions and operating methods, but grower influence was nonexistent.

Growers in general were very outspoken about what they thought should be improved in the Pompano market operations. Eighty per cent offered suggestions (Table 99). The most important ideas are included, along with their frequencies. Most of the ideas for improvement were aimed at what was felt to be unfair advantage in the hands of buyers and the buyer-inspired operating procedures of the market. More than half the growers interviewed thought that the practice of booking orders by selling brokers should be stopped. Some other ideas offered with equal frequency by the growers were as follows: Require no early samples and sell all lots for a cash price upon arrival; break up dominant buyer influence; stop the pooling of orders to prevent bidding among buyers; and put selling brokers on a commission basis so they will try to sell at higher prices.

Grower suggestions for improvements.--The group of growers who were currently using the state market were asked for their suggestions on changes in the method of sales. Suggested changes came from 77 per cent of the growers (Table 100). The reasons given and their frequencies indicate growers want to be better informed. They want to know what

TABLE 99.--Response to question: "Do you have any ideas for improving the State Farmers' Market?"; 25 growers, Pompano area 1959-60 season

Item	Grower Replies	
	Number	Per Cent
<u>Opinions</u>		
Yes	20	80
No	5	20
Total	25	100
<u>Suggested improvements^a</u>		
Stop the practice of booking, at an undetermined price, a grower's entire harvest for the day to the first buyer who likes the sample which was rushed to market early in the morning. All buyers should have an opportunity to make a cash offer for any goods put up for sale; and no sales should be made without a cash commitment.	13	. .
The practice of requiring a sample early in the day costs growers about \$25 per day, plus great inconvenience, and then the price is not determined until late at night. There should be a fixed time for sales to start and then have what goods are on hand sell for cash.	5	. .
Break up the controlling influence over market operations that the buyers' organization now has.	5	. .
Stop buyers from pooling their orders to make one bid and then requiring the selling broker to bill each buyer for his respective packages at the single bid price.	5	. .
Selling brokers should be required to work on a percentage fee instead of a flat package fee. On a flat-fee basis there is a tendency to work for larger volume at lower prices rather than maximum dollar sales.	5	. .

^aSome growers gave more than one suggestion.

TABLE 100.--Response to question: "Would you like to see some changes made for selling your vegetables at the State Farmers' Market?"; 22 growers out of 25 interviewed, Pompano area, 1959-60 season

Item	Grower Replies	
	Number	Per Cent
<u>Opinions</u>		
Yes	17	77
No	5	23
Total	22	100
<u>Suggested changes in method of selling^a</u>		
All sales should be for highest cash price offered on a grade basis and current sales should be posted by item, quantity, grade, and price.	13	. .
Stop all booking and sell only for cash as the loads arrive at the market after opening time. Buyers should have a chance at all loads and growers need to know the prices early, so they can better control harvest activities.	11	. .
Permit no order pooling by buyers unless the successful bidder takes the entire quantity and breaks down the lot at his own expense.	4	. .
Growers should organize better so they can hire less selling agents and put greater concentration of supplies in fewer sellers' hands.	3	. .

^aSome growers gave more than one suggestion.

is happening currently in terms of quantities, grades, and prices. Growers visualized a better method of sale as one in which all interested buyers had an equal chance to make a cash purchase when the produce arrived.

Buyer Image and Opinions
of the Pompano Market

Patronizing the Pompano state market has its problems for buyers as well. Lack of facilities and lack of merchandise standardization were outstanding complaints. Several buyers thought the Pompano market was the hardest market to work that they had seen. Some of their complaints were: irregular hours of trading; booking merchandise for later delivery when it may or may not be available as to condition and quantity; poor quality maintenance procedures; excessive handling and destructive treatment.

Buyers interviewed.--Fifteen buyers covering all types of operations were interviewed. They included five independent dealers, five account buyers, and five chain or retail affiliated group buyers. Each freely discussed his problems and opinions on produce marketing and state market operations.

Buyer attitudes toward market.--Eight buyers thought volume and selection of supplies at the Pompano market was good

but that improvements in the market were needed (Table 101). Four buyers thought the Pompano market was a treacherous market to work because the buyer took all the risk with no inspection-buyer-beware policies. Foreign matter was frequently found in containers and spoilage in transit could not be recovered. Variations in grade, quality, and packs seemed to be the major concern. This was especially true when the buyers felt they had received merchandise which was not as represented and they had no recourse. Serious objections to inadequate facilities were also items of concern.

Opinions and problems.--Six of the 15 buyers interviewed thought that growers were unfairly treated. Only 5 thought that buyers were unfairly treated (Table 102). Four buyers reported no evidence of unfair treatment to anyone.

All but one buyer interviewed expressed an opinion of what constituted the greatest problem for buyers (Table 103). Most of those opinions involved obtaining merchandise when they wanted it and scheduling shipments. Lack of merchandise uniformity, dependability, and quality reputation were also mentioned as major problems.

Opinions on the greatest grower problems were obtained from 13 of the 15 buyers. Their ideas centered around growers' failing to get maximum returns for their

TABLE 101.--Response to question: "How would you describe the Pompano State Farmers' Market as a place to buy produce?"; 15 buyers, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Descriptions</u>		
Very good market.	3	20
Good volume and selection, but market needs improving.	8	53
A treacherous place to buy, where buyers take all the risks	14	127
Total	15	100
<u>Reasons why buyers described market as they did^a</u>		
A hard place to buy with dependability and confidence.	8	..
Selling brokers will sell anything good or bad at the top-of-the-market.	8	..
Facilities and service are inadequate. Example: no toilets on platform and phone booths get used for toilets; poor phone service between platform and office building; no police protection for person or property; transfer companies are not licensed and are not responsible contracting agents.	8	..
No price differences between various grades and conditions of merchandise.	7	..
It is a buyer-beware market because of deceptive packs with regard to grade and quality standards.	7	..
Too much noise and confusion for use of telephone on the platform. People loitering and getting in the way interfere with trade and operations.	5	..

TABLE 101.--Continued

Item	Buyer Replies	
	Number	Per Cent
No concern for quality maintenance.	5	. .
The practice of booking an entire day's harvest based on an early morning sample places large amounts of merchandise out of reach of many buyers. Late at night all booked merchandise gets the top-of-the-market price.	5	. .
No definite hours of operation.	4	. .
No market improvement committee, advisory committee, or buyer representation.	3	. .
Selling brokers cater to large buyers.	3	. .
Too much handling and too much rough treatment of merchandise.	3	. .

^aSome buyers gave more than one reason.

TABLE 102.--Response to question: "Are buyers and growers treated fairly at the market?"; 15 buyers, Pompano market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Opinions</u>		
Buyers not treated fairly	5	33
Growers not treated fairly	6	40
No unfair treatment	4	27
Total	15	100

Reasons why buyers are not treated fairly^a

Buyers cannot look at every package. They sometimes get foreign material in packages since there is no federal inspection and no grower pride in the packs. 4 . .

When a buyer books an order for future delivery based on a sample of merchandise, he must take what he gets on the delivery. 2 . .

All decisions made on the market favor the growers. 2 . .

The risk of spoilage in transit is borne by the buyer. 2 . .

Reasons why growers are not treated fairly^a

Growers do not receive a price which reflects the true value. The practice of booking removes a log of goods from further offers and permits them to be sold for the one set market price, regardless of quality. 3 . .

Concentration of buying power leaves few marketing decisions to growers. 3 . .

TABLE 102.--Continued

Item	Buyer Replies	
	Number	Per Cent
Growers are not equal in the hands of their selling agents, since the brokers favor the large growers.	2	. .
Growers suffer when merchandising practices do not change with supply and price changes.	2	. .

^aSome buyers gave more than one reason.

TABLE 103.--Response to question: "What are the greatest problems experienced in this market by: (a) Buyers? (b) growers?"; 15 buyers, Pompano market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Opinions of buyers' problems</u>		
Those expressing opinions	14	93
Those expressing no opinions	1	7
Total	15	100
<u>Buyers' problems identified^a</u>		
Buying earlier in the day without booking orders.	5	. .
Locating uniform packs of quality goods on a dependable basis.	5	. .
Scheduling mixed-load trucks that must receive part of load from several point-of-origin locations.	3	. .
Buying a truck load of merchandise early enough in the day so that third morning delivery schedule can be met.	3	. .
<u>Opinions of growers' problems</u>		
Those expressing opinions	13	87
Those expressing no opinions	2	13
Total	15	100
<u>Growers' problems identified^a</u>		
Some buyers who book orders early in the day throw over the goods late at night instead of taking it as planned.	4	. .

TABLE 103.--Continued

Item	Buyer Replies	
	Number	Per Cent
Growers do not know what days or what hour of the day a strong demand for their goods will exist.	3	. .
No federal inspection, grading, or labeling enables growers of poor goods to obtain same prices received by top quality growers.	2	. .
Undependable packs on the state market are driving buyers to packing-house selling organizations.	2	. .

^aSome buyers gave more than one problem.

products because of certain weaknesses in the system, or because of certain grower procedures. Lack of grade, quality, and pack controls and standards were mentioned, together with the booking practice of selling brokers on the market.

Buyers were asked with whom they would rather trade. Twelve of the 15 responded (Table 104). Three had no preference. Four would rather deal directly with growers. Six preferred to trade with growers' selling brokers, and two preferred to do business with packing-house sales agents.

Eleven of the 15 buyers interviewed preferred the private sale method of purchasing with no booking of orders. Most buyers wanted to see the merchandise, buy what they liked, and take possession of it immediately. They did not like committing themselves to unseen merchandise that may or may not be as good quality as the sample shown and may vary considerably from the quantity requested.

When asked the second time about methods of buying produce, but changing the emphasis from preferred method to ideal method, buyers responded differently. To the question on ideal method of buying produce, 40 per cent of the buyers mentioned packing-house sales organizations and 47 per cent mentioned private sale with no booking

TABLE 104.--Buyer opinions on preferences for traders and method of trade; 15 buyers, Pompano market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Those who had preferences for dealing with:</u>		
Grower	4	27
Selling broker	6	40
Packing-house salesman	2	13
No preference	3	20
Total	15	100
<u>Those who had preference for method of trade</u>		
Private sale with no booking	11	73
Auction	4	27
Total	15	100

(Table 105). One buyer expressed no preference and one felt that the auction was ideal.

Buyers' suggestions for improvements.---Buyers interviewed were asked what changes they would make if they were market managers, and 14 suggested changes (Table 106). Improvements of market facilities and better-quality products were most frequently mentioned. Stop the booking of orders, establish regular trading hours, and require grading and labeling of merchandise were high on the list of changes suggested.

Buyers differed very little from growers in their opinion of the preferred sales methods. It was shown previously that 52 per cent of the 25 growers interviewed were currently selling all their production at the state market. Seven of the 15 buyers said that, if they were growers, they would sell at the state market (Table 107). Five buyers, or 33 per cent, would prefer to sell through packing houses.

When asked about the future of vegetable marketing in the Pompano area, all of the buyers interviewed thought that packing-house sales would replace a considerable part of state market sales (Table 108). They said that larger volumes handled by fewer people would bring greater economy

TABLE 105.--Response to question: "What is your idea of an ideal method of buying produce?"; 15 buyers, Pompano market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Ideal method of buying</u>		
At packing house	6	40
At private sale with no booking	7	47
At auction	1	7
No preference	1	6
Total	15	100

TABLE 106.--Response to question: "If you were to become manager of this market, for what changes would you work?";
15 buyers, Pompano market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Opinions</u>		
Those who would make changes if they were market managers.	14	93
No idea for changes.	1	7
Total	15	100
<u>Suggested changes^a</u>		
Improve facilities.	9	. .
Require proper handling and quality maintenance practices.	6	. .
Have regular hours for trading.	4	. .
Require grading and labeling.	4	. .
Stop all booking and give buyers dumping privileges for inspection.	3	. .

^aSome buyers gave more than one suggestion.

TABLE 107.--Response to question: "If you were a grower in this area, how would you sell your vegetables?"; 15 buyers, Pompano market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
Packing house	5	33
State market with no booking	7	47
Ship directly on reputation	1	7
Auction	2	13
Total	15	100

TABLE 108.--Response to question: "What changes do you see for vegetable marketing in the future for this area?"; 15 buyers, Pompano market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
Ideas for future	15	100
Changes anticipated:		
More packing-house operations and selling because of reduced middlemen, better supervision of grading, packing, selling, distribution, supply management, quality control, and guaranteed delivery of quality and condition.		

in handling produce through packing houses. Packing-house handling would also permit better control of uniformity, standardization, distribution, supply management, and guaranteed deliveries. All of this, said the buyers, would increase marketing efficiency. The Belle Glade vegetable packing-house operations and the citrus industry selling methods have captured the imagination of the buyers at the Pompano market.

Summary and Appraisal of the Pompano Market

Summary.--The Pompano State Farmers' Market, located at Pompano Beach in the heart of a large, relatively frost-free and diversified vegetable producing area, has been the most successful of any of the State Farmers' Markets for vegetables. In addition to serving the local area, it draws some produce items from other areas within a radius of 60 miles to the south and west. An average of 80 per cent of all vegetable items produced in the area are sold through this state market and an average of 40 carlot equivalents were handled per day of market operation for the five seasons 1956 to 1960.

State market facilities consist of a large covered sales platform, administration building, restaurant, communications media, and extensive paved parking and loading

area. Growers rent space on the platform and sublease to selling brokers for display and sale of produce. Buyers rent office space in the administration building for the conduct of business.

Selling brokers represent growers on the market, acting as the selling agent and receiving payment on a package basis. Buyers place reservation orders with selling brokers as soon as their daily requirements are known. Brokers and buyers establish prices at the end of the trading day on the basis of rate of movement, quantities handled, leftover supplies and the price trends of cash sales during the day.

Sales at the market averaged over \$19,500,000 per season from 1956 to 1960. Market income was \$56,126 per season and operating profits, \$10,829 per year. Fixed assets of the market for the years 1956 to 1960 averaged \$430,808. Market income averaged \$6.63 per carlot equivalent of vegetables handled for the five-season period.

Management policy is one of noninterference with trading practices and of preventing any group from gaining a dominating influence on the market. Management has not felt the need for guidance from a market advisory committee.

An opinion survey of 25 growers in the area, 22 of

whom were then using the market, disclosed the facts that: (1) 80 per cent rated it fair or better, (2) 60 per cent believed it to be a buyers' market, (3) 84 per cent favored an advisory committee to aid management, (4) 52 per cent wanted the practice of booking stopped, and (5) 96 per cent suggested some form of cash sale at the market.

A similar survey of 15 buyers using the market indicated that: (1) 20 per cent rated it very good, (2) 33 per cent thought buyers were not treated fairly, while 40 per cent thought growers were unfairly treated, (3) 40 per cent preferred dealing with selling brokers, yet 73 per cent favored private sale with no booking, and (4) 93 per cent wanted some changes in market operation (mainly quality controls).

A large majority of growers and buyers interviewed were against the broker's practice of booking. Those interviewed gave several reasons why they objected to booking, and how they felt the practice worked to their disadvantage. They did not mention any advantages, yet growers continued to have their produce sold by selling brokers who used it. In all fairness, some of the reasons for the use of the booking method of sale should be mentioned:

1. A single market price for the day can be justified as fairest to all concerned, insofar as conditions of pure competition prevail.

2. Sales at firm prices during the day would mean a greater risk for the buyer. This could result in a lower price for the grower.
3. Since all growers get about the same price each day for their produce without much differential for grade and quality variations, growers can easily check daily sales invoices from selling brokers to determine whether or not they have been treated fairly for the day.

Selling brokers, since they are only agents of the growers, were not interviewed. However, the practice of booking has certain obvious advantages for them.

1. It makes their job easier and more secure, since they know that all other selling brokers are receiving about the same price for the products.
2. It makes unnecessary the requests for, and arguments over, allowances to volume buyers as a result of a price decrease during the day on any item.
3. They assume relatively little risk.

Appraisal.--Historical and current operating data are very impressive, indicating the market's success and its importance to the Florida vegetable industry. However, it also has been shown that even the largest-volume, most successful State Farmers' Market was criticized by both growers and buyers. In time, these dissatisfactions may undermine the status of this market unless: (1) some public relations activities are undertaken to improve the patron experiences and images of the market, and (2) selling brokers are

required to operate in accordance with the desires of a majority of growers and buyers.

Within the past five years, several packing houses have been built adjacent to, but not on, the market premises. These have the opportunity of making private sales of graded merchandise or of selling through brokers on the market. Data are not available to determine whether the private sale method has brought or will bring higher prices to growers. However, it is reasonably certain that, as growers become fewer in number and larger in size in the area, more of them will build or rent their own packing houses and employ their own sales personnel in an effort to integrate production and marketing to their individual advantage. The Pompano market can contribute to this movement and assure its continued importance by encouraging growers to lease buildings erected on market property for use as packing houses.

Starke State Farmers' Market

The Starke State Farmers' Market is located on highway U. S. 301 just north of the city limits of Starke. The city of Starke is in the northeastern part of Florida, approximately 40 miles southwest of Jacksonville. This is

an old farming community and was one of the first areas in the state to grow vegetables for shipment. Present vegetable production, however, is small and scattered. People in the area now have economic alternatives better than vegetable production. The area must compete with large commercial vegetable production in areas further south as well as similar areas in Georgia and the Carolinas. As a result, the Starke area must sell its produce during a very short season and then usually at low prices.

The Starke market area encompasses Bradford and Union Counties. Farm numbers in this area have declined since 1929, while farm acreage has increased (Table 109). However, both the number of farms growing vegetables and acreage of vegetables grown have declined with each successive census since 1929. The proportion of farms growing vegetables and the proportion of farm land in vegetables have also declined.

For the most part, vegetables are grown as a sideline by people living in rural areas, but working full time at non-farm employment. The major vegetables being grown, in order of importance by volume, are watermelons, beans, Irish potatoes, cucumbers, sweet corn, peppers, squash, cabbage, eggplant, and strawberries (Table 110).

TABLE 109.--Number, acreage, and size of all farms and vegetable farms in the Starke State Farmers' Market area, by decades, 1919-59

	1919	1929	1939	1949	1959
ALL FARMS:					
Number	1,286	1,528	1,448	1,171	761
Total acreage	134,608	125,406	132,478	168,140	203,617
Average size	104.6	82.1	91.5	143.6	267.7
VEGETABLE FARMS:					
Number	^a	614	536	394	111
Total acreage	2,645	5,724	5,271	4,329	1,972
Average size	^a	9.3	9.8	11.0	17.8
Percentage of farms reporting vegetables					
	^a	40	37	34	15
Percentage of farm land in vegetables					
	2	5	4	3	1

Source: U. S., Department of Commerce, Bureau of Census, United States Census of Agriculture, 1920-60.

^aNot available.

TABLE 110.--Vegetable production by items in the Starke area and the quantities sold at the State Farmers' Market, average for five seasons, 1955-56 through 1959-60

Item	Production	Sold at State Market	Proportion of Sup- plies through State Market
	(Carlot equivalents)	(Carlot equivalents)	(Per cent)
Beans, Lima	28	1	4
Beans, snap	58	1	2
Cabbage	26	0	0
Corn, sweet	32	15	47
Cucumbers	51	7	14
Eggplant	25	1	4
Peppers	32	8	25
Potatoes, Irish	57	.	0
Squash	28	.	0
Strawberries	16	20	125
Watermelons	170	.	0
Bunched vegetables	5	.	0
Other vegetables	7	2	29
Total	535	55	10

Sources: Florida, State Marketing Bureau, Annual Agricultural Statistical Summary, 1956-60; and Florida, State Agricultural Marketing Board, Annual Reports, 1956-60.

The volume of vegetables produced in this area was 535 carlot equivalents per year during the five seasons from 1956 to 1960.

Only one-tenth of the vegetables produced in the Starke area were sold at the Starke State Farmers' Market during the five-year period. The important items, based on volume sold, were strawberries, sweet corn, peppers, and cucumbers. The quantity of strawberries that was reported as sold at the state market exceeded the quantity that was reported as being produced in the area. About one-half of the corn and one-fourth of the peppers were sold at the market. For other items, a very small proportion of the available supplies was sold at the state market. A sizeable volume of pecans was also handled.

Market Facilities and Operation

Facilities at the Starke market include two large platform sales sheds, offices, an auction shed, and rest rooms. Most of the platform sales space must have been built with the idea that a large physical plant would make a strong successful market. Successful produce markets need much more than enormous physical facilities, however, and most of the other ingredients for a successful market

at Starke are still lacking. Needless to say, there is considerable unused market space throughout much of the operating season. A pre-cooling machine for sweet corn and a walk-in refrigerator are the main items of machinery for rent. Some dealers who operate on the market rent machinery; some, platform space; some, office space; while some do none of the above.

Buyers on the Starke market operate as f.o.b. buyers, consignment shippers, or commission merchants. Strawberries are generally sold at auction, but a sizeable part of the crop is sold on a private-sale basis to local handlers. This is referred to as set-off sales. Usually the average of auction prices is paid on such set-off sales. Most other items are sold either on a set-off basis at the average price for the day or as consignment shipments.

Rules and regulations for the Starke State Farmers' Market originated in the same manner as those for the Pompano market, as the general rules from the State Markets' Director are identical. As in the case of Pompano, an advisory committee is not used.

The operating policy on the Starke market is for the manager to keep hands off the trading and negotiations

between buyers and growers. Management at this market feels that all transactions should be arranged through dealers on the market. However, the manager will attempt to find a buyer for a grower's load if there are no dealers operating on the market at the time. This frequently becomes a consignment sale.

Alternative sales outlets are numerous around the Starke area. Growers have ample opportunity to choose between several types of first sale handlers. Within a 20-mile radius of Starke there is another State Farmers' Market at Brooker, which has about the same operating plan and volume of business as Starke. It, too, handles only small quantities of a few vegetable items and, like Starke, does not have sufficient income to cover costs of operation and maintenance. Although the combined volume of Brooker and Starke is too small for one strong market, there are additional buying and shipping points available. Within the 20-mile radius are Lake Butler, LaCrosse, and Santa Fe. At each of these points, there are packing houses operated by local or seasonal handlers who offer to buy produce from all growers who haul to them. With the large number of country assembly points for vegetables that exist in the Alachua-Bradford-Union County, area, there is little wonder

that no one point has received any particular distinction for volume or size. Maybe if one single market could get most of the volume from the three-county area -- Alachua, Bradford and Union -- it could be much more successful than the Starke and Brooker markets have been.

Sales, Income, and Expenses

Average daily volume amounted to less than one-third of a carlot quantity during the five seasons from 1956 through 1960. Average sales were \$164,790 per year during the period from 1956 through 1960 (Table 111).

TABLE 111.--Important operating figures for the Starke State Farmers' Market, average for five seasons, 1955-56 through 1959-60

Item	Average per Season
Sales	\$164,790
Income	3,740
Expenses	6,400
Loss	2,660
Personnel expenses	2,922
Fixed assets	77,654

Income averaged \$3,740; expense, \$6,400; and loss, \$2,660 per year during the same period. Income, as the cost of business for patrons, amounted to \$68.00 per carlot quantity of vegetables sold. However, total market expenses were the actual costs of operation, including what was paid from public funds and income from patrons. These amounted to \$116.36 per carlot quantity of vegetables sold during the five-year period.

Annual sales amounted to \$2112 per dollar of fixed assets. This compares with \$45.47 for the Pompano market.

Management Opinions Regarding Market Operation and Practices

The state market at Starke has a year-round manager even though it operates only two months for strawberries, two months for other vegetables, and a month or so in the fall for pecans. As already pointed out, even though average daily volume during most of the time does not justify operation, it continues.

Management is aware of the competitive outlets for vegetables in the area, but has no plans for gaining a competitive advantage over such outlets. This is in spite of the fact that the state market has no costs for such items as interest on investment, depreciation, or taxes. This

should give the market considerable bargaining power in offering low-rent assembling facilities to dealers in the area. Management also collects a package fee from growers who come to the Starke market, while dealers who operate at other points in the area buy produce outright from the growers, and make no deductions. Since growers seek to sell elsewhere to avoid paying a service charge, package fees under such circumstances work to the disadvantage of the state market.

There is a strong belief on the part of management that all the Starke market needs to become successful is more volume. However, increased volume requires expanded production. The feeling is that buyers are easier for the market to attract than is volume. The fact that buyers frequently pay prices in the area which are generally below costs of production seems of little importance to the manager. He believes that all the grower can get is "market price." The feeling appears to be that the demand is available and growers "should produce to fill the demand."

Grower Use and Image of the State Market

Growers surveyed and market use.--Twenty-six growers were interviewed in the Starke area. They had grown vegetables in the area 7 to 50 years and averaged 27 years. Acres of vegetables per grower ranged from 1 to 100 and averaged 18. The various crops grown, the number of growers reporting each, and the proportion in the survey reporting each are presented in Table 112.

TABLE 112.--Vegetable crops grown by 26 growers interviewed in the Starke State Farmers' Market area and the number of growers raising each crop during the 1959-60 season

Item	Number of Growers	Proportion Raising Crop (Per cent)
Beans, Lima	7	27
Beans, snap	3	12
Cabbage	. .	0
Corn, sweet	11	42
Cucumbers	. .	0
Eggplant	. .	0
Peppers	8	31
Potatoes, Irish	. .	0
Squash	1	3
Strawberries	18	69
Watermelons	3	12
Bunch vegetables	28	31
Other vegetables	13	50

Only five of the 26 growers interviewed sold at the Starke market all of the vegetables they produced (Table 113).

TABLE 113.--Use of the Starke State Farmers' Market by vegetable growers interviewed; 26 growers, 1959-60 season

Extent of Use	Grower Replies		Acreage of Vegetables per Grower
	Number	Per Cent	
Total production	5	19	9
Part of production	19	73	21
No sales	2	8	13
Total	26	100	. .

Nineteen growers sold only part of their vegetable production there, while two growers sold nothing. The two growers not using the market had sold there in the past, and would like to do so again if they could sell for cash, receive reasonable prices, sell all of the items they grow (Table 114). Both have been better satisfied with present sales outlets.

Grower attitudes toward market.--All growers interviewed were familiar with and willing to discuss the Starke State Farmers' Market. Fifteen of the growers admitted that they

TABLE 114.--Vegetable growers in the Starke area who were not using the State Farmers' Market at time of interview:
2 growers out of 26 interviewed, 1959-60 season

Item	Grower Replies	
	Number	Per Cent
<u>Affirmative answers to questions</u>		
Will you discuss reasons for not using the state market?	2	100
If suitable changes were made in operations, would you use the state market?	2	100
Have you ever used the state market?	2	100
<u>Reasons for not using market^b</u>		
Better prices and more buyers at other selling locations.	2	. .
No cash buyers for small lots come to Starke for anything except strawberries. Jacksonville sales are fast, sure, and for cash.	2	. .
<u>Changes suggested to make market operation acceptable^b</u>		
Have cash buyers for small lots of all kinds of items.	2	. .
Have buyers who would pay respectable prices.	2	. .

^aBoth growers stated they were better satisfied with sales through their present outlets than they had been with the state market.

^bSome growers gave more than one answer.

had heard other growers in the area discussing the state market, but only 13 felt that other growers had attitudes similar to their own.

Sixteen of the 26 growers interviewed rated their state market as poor and only 5 rated it fair, 4 good, and 1 excellent (Table 115). The most frequent reason given for the poor rating was that large buyer-distributors no longer patronize the market and local dealers only paid prices which were below costs of production and harvest. Growers indicated that in many cases their products had no local outlets at any price and had to be consigned or transported elsewhere. It was stated that consignment sales were not very satisfactory. Some growers claimed that they received only 10 or 15 per cent of the amount paid for the produce at the wholesale market, and many times they were fortunate to get that much. Another reason given was that small growers or specialty line growers could find no outlet at the state market. For these and other reasons, many growers sold most of their production in Jacksonville or directly to truckers.

More than two-thirds of the growers interviewed wanted an advisory committee to help the market manager make the changes needed to improve the market (Table 116). Apparently better community public relations, area support, and

TABLE 115.--Response to question: "What do you think of the Starke State Farmers' Market Operations?"; 26 growers, Starke area, 1959-60 season

Item	Grower Replies	
	Number	Per Cent
<u>Rating</u>		
Excellent	1	4
Good	4	15
Fair	5	19
Poor	16	62
Total	26	100
<u>Important reasons why growers felt as they did^a</u>		
Large buyer-distributors never come to the S Starke market. The small local dealers pay prices which are below costs of production and harvest. Many times growers' products cannot be sold at any price and consignment sales are the only alternative; but this type of sale is usually unsatisfactory.	13	. .
Small growers or specialty item growers cannot get buyers at the Starke market to handle their products.	6	. .
Low volume hurts the market, but buyers are easier to get than larger supplies are to sell.	5	. .
All sales should be at auction. The auction should start at a designated time and move fast. Growers are required to waste too much time waiting for slow-moving auction sales.	4	. .

^a Some growers gave more than one reason.

satisfactory sales experience are needed in large measure if growers are to be encouraged to bring a larger proportion of their production, other than strawberries, to Starke for sale. Accompanying increased volume at the state market must be a price structure that is more in line with alternative marketing outlets. An advisory committee properly handled might ignite a rallying movement to obtain a larger proportion of area supplies, provided some changes were made to improve certain grower impressions of market operations.

TABLE 116.--Opinions of vegetable growers in the Starke area concerning a farmers' advisory committee to work on problems with the manager of the State Farmers' Market; 26 growers, 1959-60 season

Opinions	Number of Growers	Proportion of Growers
		(Per cent)
Advisory committee should be selected by farmers to speak for them and should have some influence over operating policies.	18	69
Advisory committee is not necessary because farmers cannot get together or do not understand market operation.	8	31
Total	26	100

Suggestions for improving the market were made by most of the growers interviewed. Twenty of the 26 growers had ideas for improvements (Table 117). The most frequent improvement suggested was to obtain greater volume of production and to get more buyers. The supply and demand relationships needed to reach these objectives seemed of no concern to the growers. Increasing volume is not necessarily all that is needed to attract large buyers who are anxious to pay high prices. The next most frequent improvement suggested may be the point of beginning if the market is to be improved. Three growers suggested that the greatest need was to secure more grower support for the market and promote uniformity of grade, pack, and containers for all items. These suggestions seem to be good ones because at present many growers sell only strawberries at the Starke market and do so reluctantly.

Of the 24 growers who used the state market, the average grower had patronized it for 20 years. There was a tendency for growers with larger vegetable acreages to sell part of their products at the Starke market and part at other locations.

Grower suggestions for improvement.---Twenty of the 24 growers using the market favored changes in the method of

TABLE 117.--Response to question: "Do you have any ideas for improving the State Farmers' Market?"; 26 growers, Starke area, 1959-60 season

Item	Grower Replies	
	Number	Per Cent
<u>Opinions</u>		
Yes	20	77
No	6	23
Total	26	100
<u>Suggested improvements^a</u>		
Obtain greater volume of production and get more buyers.	13	. .
Secure more grower support for the market and promote uniformity of grade, pack, and containers.	3	. .
Use auction for all sales, but establish a regular time schedule and stay on time. Growers object to slow, time-consuming auction sales.	2	. .
Have all sales prices determined on a basis of grade and condition and not on a basis of the sellers' personality (reputation).	2	. .

^aSome growers gave more than one suggestion.

sale (Table 118). Most wanted to see a standard sales method adopted and enforced. Auction selling was preferred, but they wanted only one standard procedure adopted so that all growers could expect equal treatment. Also, they wanted to see sales put on a grade basis and current prices posted at all times so harvesting could be stopped when prices dropped below cost of harvesting. They realized that cash buying and suitable sales methods would have to accompany price posting.

Buyer Image and Opinions of the Starke Market

Buyer attitudes and opinions.--All of the five transient buyers registered at the Starke market in 1960 were interviewed regarding their opinions. Three of those buyers purchased only strawberries at Starke. All had a rather low opinion of the market. They felt the Starke area had too much competition from other areas to survive. The small production in the area also overlapped production in several other larger, more important areas. Four of the buyers said the Starke market was unimportant to them (Table 119).

The buyers in general thought the Starke market was operated as fairly as it could be under the circumstances. Three buyers expressed an opinion that there was no evidence

TABLE 118.--Response to question: "Would you like to see some changes made for selling your vegetables at the State Farmers' Market?"; 24 growers out of 26 interviewed, Starke area, 1959-60 season

Item	Grower Replies	
	Number	Per Cent
<u>Opinions</u>		
Yes	20	83
No	4	17
Total	24	100
<u>Suggested changes in method of selling^a</u>		
Agree on one method of sales and stick to it.		
Auction would be best.	12	. .
Require all sales to be on a grade basis and keep current prices set by grades so growers could stop harvesting if there was no demand for the products at floor price level or above.	5	. .
Permit only cash buyers to use the state market, because consignment shipments are too expensive and uncertain.	4	. .
Stop small local dealers from controlling buyers' operations and from buying only from their friends and kinfolks.	2	. .
Have an established time for sales and keep sales moving fast so growers can come to market, sell their products, and get back to work.	2	. .

^aSome growers gave more than one suggestion.

TABLE 119.--Response to question: "How would you describe the Starke State Farmers' Market as a place to buy produce?"; five buyers, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Descriptions</u>		
The market and the area are unimportant.	4	80
Auction does not serve the best interest of the grower or buyer because of exhibitionism and unrealistic market prices.	1	20
Total	5	100
<u>Reasons why buyers described market as they did^a</u>		
Production is too small and competition is too much for this area.	4	..
Supplies are light and unpredictable.	4	..
It is a packing and shipping market, not a farmers' market.	2	..
For everything except strawberries, a buyer places an order with growers who will bring in the items if they want to or if they have them. There is no actual buying of most items any more and the market potential is gone.	1	..
With auction selling, growers are subject to the many moods and motivations of buyers. Also, buyers pressure each other by gang-ing up against one buyer who has bought		

TABLE 119.--Continued

Item	Buyer Replies	
	Number	Per Cent
almost a truck load and they bid prices up in an effort to prevent him from completing his load or to hurt him financially so he will not return for another load or to hurt him financially so he will not return for another load. Another objection to auction selling is that some buyers like to be recognized as setting the price for the day and will bid up a small lot to an unreasonable price. This procedure distorts and confuses the true market-price situation.	1	. .

^aSome buyers gave more than one reason.

of unfair treatment (Table 120). One buyer felt that buyers were mistreated by not permitting all buyers to bid equally for all merchandise, and one felt that growers were mistreated by not having enough merchandise to create competitive prices. Both cases of mistreatment involved low volume of supplies and lack of fair competition in trading.

All buyers interviewed had opinions on buyer problems, and grower problems (Table 121). Low volume and poor quality were the major buyer problems. Too much competition from other production areas was the major grower problem expressed by buyers.

Buyer preferences were four to one in favor of dealing with growers (Table 122). Selling brokers was the other preference mentioned. However, when asked for a preference in method of trade, buyers had other ideas. Three preferred packing-house salesmen and the other two were divided between auction and selling brokers. Results from exploring buyers' opinions on ideal buying methods were in line with trading preferences. Three suggested packing houses, one preferred private negotiations with sellers, and one desired auctions (Table 123).

TABLE 120.--Response to question: "Are buyers and growers treated fairly at the market?"; five buyers, Starke market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Opinions</u>		
Buyers not treated fairly	1	20
Growers not treated fairly	1	20
No unfair treatment	3	60
Total	5	100

Reasons why buyers are not treated fairly^a

Buyers are encouraged to patronize the market, but there is not enough volume to justify their coming. In order to do any business, once a buyer is at the market, he has to almost fight other buyers to become established.

1 . .

Reasons why growers are not treated fairly^a

There is not enough merchandise nor demand at this location to create a true market-price situation.

1 . .

^aSome buyers gave more than one reason.

TABLE 121.--Response to question: "What are the greatest problems experienced in this market by: (a) Buyers (b) growers?"; five buyers, Starke Market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Opinions of buyers' problems</u>		
Those expressing opinions	5	100
Total	5	100
<u>Buyers' problems identified^a</u>		
Not enough supplies.	3	. .
Poor quality and pack. The Starke berry is a weak shipper.	2	. .
Anticipating what supplies will be available.	1	. .
Unrealistic market prices, either too high or too low.	1	. .
<u>Opinions of growers' problems</u>		
Those expressing opinions	5	100
Total	5	100
<u>Growers' problems identified^a</u>		
Not enough volume to establish buyers or shippers.	3	. .

TABLE 121.--Continued

Item	Buyer Replies	
	Number	Per Cent
Too much competition from other areas and not enough buyers.	2	. .
Low prices.	1	. .
No supply management or no supervision of preparation for sales.	1	. .

^aSome buyers gave more than one reason.

TABLE 122.--Buyer opinions on preferences for traders and method of trade, five buyers, Starke market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Those who had preferences for dealing with:</u>		
Growers	4	80
Selling brokers	1	20
Total	5	100
<u>Those who had preferences for method of trade</u>		
Packing-house salesmen	3	60
Auction	1	20
Private sale with no booking	1	20
Total	5	100

TABLE 123.--Response to question: "What is your idea of an ideal method of buying produce?"; five buyers, Starke market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Ideal method of buying</u>		
At packing house	3	60
At private sale with no booking	1	20
At auction	1	20
Total	5	100

Buyers' suggestions for improvements.--Three of the buyers interviewed would make changes if they were to become market managers (Table 124). Changes would include teaching growers the importance of volume in operating a market and require inspection and uniformity of containers. One buyer would discourage vegetable production and close the market.

When asked how they would sell if they were growers, three said that they would prefer an auction and two said that they would prefer packing-house handling and selling (Table 125).

All five buyers felt that in the future, more packing-house selling would be used if the Starke area was able to continue production in competition with other

TABLE 124.--Response to question: "If you were to become manager of this market, for what changes would you work?"; five buyers, Starke market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
<u>Opinions</u>		
Those who would make changes if they were market managers	3	60
No ideas for change	2	40
Total	5	100
<u>Suggested changes^a</u>		
Teach growers that a successful market needs volume or should be closed.	1	. .
Standardize containers and require grading, inspection, and labeling.	1	. .
Discourage production in this area and close the market.	1	. .

^aSome buyers gave more than one suggestion.

TABLE 125.--Response to question: "If you were a grower in this area, how would you sell your vegetables?"; five buyers, Starke market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
Packing house	2	40
Auction	3	60
Total	5	100

areas (Table 126). Three felt that vegetable production in the Starke area would not be continued for long.

TABLE 126.--Response to question: "What changes do you see for vegetable marketing in the future for this area?"; five buyers, Starke market, 1960-61 season

Item	Buyer Replies	
	Number	Per Cent
Ideas for future	5	100

Changes anticipated:

If the area continues to produce vegetables, all five buyers expect future sales to be at packing houses. However, two felt that volume should be increased to improve the area, and three buyers felt that competition from other areas was too great for the Starke area to survive.

Appraisal of the Starke Market

It appears that the Starke area is fighting a losing battle with its small-acreage, part-time vegetable growers who are not able to compete successfully with large-scale, highly specialized, commercial vegetable growers in other areas. Most of the evidence seems to indicate that any comparative advantage Starke had in the early days of vegetable production in Florida now has been overcome by an economic advantage in competing areas. A large volume of uniform, high-quality vegetables, associated with large-scale mass production, cannot be found in Starke. The assembling of large quantities of supplies of many different items on a dependable basis such as that required by today's mass merchandising techniques is not to be had in the Starke area either now or in the foreseeable future.

Vegetable production in the area has been adequate to support a stronger market if all of the production had been handled at one place and the operating period had been limited. However, such an accomplishment has not been possible and does not seem realistic. Expansion of vegetable production in the area on a profitable basis does not appear feasible. The question thus arises, should the Starke area continue to be heavily subsidized by keeping a little-used

market operating with a full-time manager, especially when the operation has little community support? Renting low-cost facilities to local dealers who could assemble and sell the small available supplies would be much less expensive.

CHAPTER VIII

CRITERIA AND PRINCIPLES FOR ESTABLISHMENT AND OPERATION OF FARMERS' MARKETS PLANNED TO HANDLE VEGETABLES

Each vegetable farmers' market has its own characteristics. No two markets are identical. However, certain fundamentals are essential to all markets if they are to serve as successful trading centers where buyers and sellers meet to conduct business.

No market can succeed if, for any reason, buyers and sellers are not satisfied with trading experiences on the market. Trading negotiations dominated by one group or another will quickly send members of the other groups to alternative places or methods of trade. Likewise, inefficient, high-cost markets will send disillusioned traders seeking better opportunities elsewhere.

It has been shown in Chapter VI that wide differences prevail between successful and unsuccessful markets. Other studies have been made that throw additional light on what makes successful shipping-point produce markets.

This chapter suggests: (1) Criteria for analyzing the potential success and need for additional produce markets, and (2) a check list for evaluation of markets currently operating.

Criteria for Establishing and Operating
Farmers' Produce Markets

In a feasibility study conducted by the United States Department of Agriculture on a farmers' market at Leesburg, Florida, seven different considerations were used in the analysis.¹ They were:

1. Volume in relation to total production in the area.
2. Whether volume is large enough to attract buyers and provide competition.
3. Convenience of market to growers.
4. Convenience of market to buyers.
5. Accessibility of the market to rail and truck transportation.
6. Efficiency of the facilities.
7. Effectiveness of the market as a price-making mechanism.

A study of eastern seaboard farmer auction markets conducted by E. W. Cake lists five items which improve the chances of success.² They are:

¹U. S., Department of Agriculture, Concentration . . . , p. 8.

²Cake, Some Facts . . . , p. 3.

1. Large volumes of relatively perishable items.
2. No competing auctions for 15 miles or more.
3. The operation period limited to season when large daily volumes may be handled.
4. A minimum investment in physical equipment.
5. Maximum use of hired personnel.

Dollar sales values per market were considered an important criterion in a North Carolina vegetable market study.³ It maintained that a minimum of \$200,000 worth of vegetables must be available to a market from within a 20-mile radius. It also concluded that \$25 or more of vegetable sales per 100 acres of all land in the area was required to support one market.

Another United States Department of Agriculture study on FARMERS' Produce Markets spelled out some important factors contributing to successful operations.⁴ It was pointed out that no hard and fast rule of thumb could be applied to all cases because of the differences that exist in the relative importance of each of the individual factors. It stated that the factors should be considered as a group, but that flexibility must be maintained to compensate for variations that may exist. The factors listed were:

³North Carolina State College, Vegetable . . ., p. 2.

⁴U. S., Department of Agriculture, Farmers' Produce . . ., pp. 64-72.

1. Minimum average daily volume of business required is 1.8 equivalent carlots where a few items of high relative value are handled or 3.6 equivalent carlots where several items of near average relative value are handled.
2. Number and types of fruits and vegetables to be sold on the market should be limited at first until the market is established and a reputation established. Older markets should add a new commodity to their items handled each year until maximum services are rendered.
3. Size and amount of production in the area to be served by a new market should be at least five times larger than the average daily minimum volume required to make a market a success. This volume should be available within a 25-mile radius of the market.
4. Number and type of growers in the market area should be around 300, who would average 30 packages per trip to market.
5. Number and type of buyers who will patronize the market should be at least three season buyers and the number of day buyers necessary to keep all available merchandise cleaned up.
6. Method of selling should be determined by the volume of products handled so that buyers and sellers are conveniently serviced with efficiency at low cost.
7. Amount and type of facilities are highly variable by size of volume, types of commodities, services to be rendered and the like, but all markets need a sales area, space for transfer of loads, offices, paved streets, public toilets, communications, lunch room and rail and truck loading docks.

8. Market location should be determined on a basis of convenience to buyers and sellers, accessibility to railroad lines and highways, at least forty miles from the nearest competing market and in a relatively low-cost land area.
9. Ownership and management of farmers' markets should operate on a non-profit basis, give all major groups who use the market a public voice in the management, have sufficient legal authority to carry out policies, and protect the public interest.

In addition to the published materials previously referred to, the Director of State Markets in Florida has estimated the minimum size, volume, and income needed to operate and maintain a farmers' produce market with a full-time manager. Forty thousand square feet is the minimum platform space required and 280,000 packages are needed to provide the necessary business. The preferred plan for providing the approximate \$15,000 per year needed is to use a combination package fee and platform rental. Four cents per package and 10 cents per square foot are suggested. However, package fees are not desirable in all cases and 33 cents per square foot platform rental or its equivalent is then sought. Revenue is also planned from other sources such as office rent, communications commissions, etc.

Volume of business suggested by the Director of State Markets as a minimum would figure in excess of 500

carlot equivalents per year for a market with a full-time manager.

In this study of the Florida State Farmers' Markets, it has been shown that relatively large variations existed between markets. No two markets were identical and no two areas were the same.

The important differences between the more successful high-volume state vegetable markets and the less successful low-volume state vegetable markets may be divided into six categories. They are:

1. Dollar values

- a. Market sales
- b. Profit or loss
- c. Sales rate per dollar of fixed assets
- d. Value per carlot equivalent of
vegetables handled at market
- e. Cost of handling per carlot equivalent

2. Percentages

- a. Market income as percentage of sales
- b. Market profit or loss as a percentage
of sales
- c. Market quantities of vegetables as
percentage of local production
- d. Vegetable farms as percentage of all farms
- e. Vegetable acreage as percentage of all
farm acreage
- f. Market income distribution
 - Package fees
 - Platform rental
 - Packing-house rental
 - Office space rental
 - Truck registrations
 - Other

3. Physical quantities

- a. Production in market area
- b. Handled by state market
- c. Quantities handled per day of operations

4. Length of time market operates in days

5. Use of acreage in area

- a. Farm land in market area
- b. Average farm size
- c. Vegetable acreage in market area
- d. Average vegetable acreage per vegetable farm
- e. Vegetable acreage per carlot equivalent produced in area

6. Farms

- a. Number of farms in area
- b. Number reporting vegetables for sale

Probably the most critical items in the above list that are vital to successful vegetable market operation are: Costs of handling per carlot equivalent; market income as a percentage of sales; market profit or loss as a percentage of sales; market quantities of vegetables in proportion to local production; vegetable acreage as a percentage of all farm acreage; market income sources; production in market area; quantities handled per day of operation; and the operational period. The first three items measure the efficiency of the operation. The next two items and production in the market area determine the potential volume of the market. Distribution of income among sources

shows the fairness with which market patrons are required to share operating costs. Quantities handled per day of operation and the length of operating period are the attractions for buyers. Without sufficient buyers, there can be no satisfactory market.

The information provided by this study, and by other produce marketing studies which have been presented in this chapter, can be applied best to state vegetable markets through the use of the following:

Criteria for Establishing and Operating
State Farmers' Markets for Vegetables

1. Average daily volume should be six carlot equivalents for the operating season.
2. The market should operate only while minimum daily volume is equal to or exceeds two carlot equivalents of relatively high-valued items or four carlot equivalents of average relative value. At any lower volume the competitive price-making mechanism will not operate properly. These daily average minimum value limitations will tend to limit the operating season and thereby help control costs while increasing buyer and trucker confidence in volume available when markets are open.
3. Seasonal minimum volume is relatively unimportant as long as daily minimum volume and seasonal daily average volume are maintained. Any operation at less than the minimum should be converted to low-cost rental facilities for county assembly dealers or grower-operated

sales organizations. Such operations do not need managers. In some cases, the county or local Chamber of Commerce may wish to pay maintenance costs to keep assembly shed facilities available in their community.

4. Market location should be evaluated on a basis of: accessibility to highway and railroads; accommodations for buyers' comforts; conveniences and communications; and vegetable production for fresh market on 5 per cent or more of the area's farm land.
5. At least 50 per cent of the vegetable volume harvested for sale in the area should be available for state market handling.
6. Distance between state farmers' markets for vegetables should be a minimum of 40 miles.
7. The volume produced in the area of one or more items handled by each market should represent a significant part of national supply for at least a short season.
8. Operating efficiency must be assured to keep per unit costs low and competitive.
9. All patrons should be treated fairly and equally.
10. All patrons should have representation at policy-planning meetings.

Check List for Evaluation
of Current Operations

To facilitate adequate management control information, all budgets, allocations, and operating statements should be prepared for the operating season at each market

and not on an annual basis. It is likely that certain expenditures will be payable monthly throughout the year, but all revenue and expense budgets should be calculated on whatever period happens to be the operating season. If a market has a twelve-week operating season and the manager is budgeted at \$6,000 per year in equal monthly payments, the market budget should be prepared so that the \$6,000 manager's salary could be covered in the twelve-week operating period.

A suggested check list for management and market evaluation is as follows:

1. Daily volume of sales should exceed two carlot equivalents of relatively high-value items or four carlot equivalents of average relative value items before the market opens.
2. The minimum weekly volume on which the budget was based should be divided by the number of weeks the market usually remains open to find the average weekly minimum volume. If actual volume does not equal or exceed average weekly minimum volume early in the season, the budget should be adjusted accordingly and stronger efforts made to attract a larger volume of business.
3. Average weekly income and expense requirements should be calculated for the number of weeks for which the market is usually open. Comparisons between actual and average should be made each week so that appropriate action to adjust the budget could be taken as needed.

4. Market income should approximate an amount equal to 1 per cent of sales value.
5. Personnel expenditures should not exceed 50 per cent of market income.
6. Grower-selected representatives should attend operational policy meetings so that their views may be heard and the market's public relations channels kept open to them.
7. Buyer-selected representatives should attend operational policy meetings so that their views may be heard and the market's public relations channels kept open to them.
8. Transportation representatives should be invited to attend operational policy meetings at markets where traffic congestion is a problem.
9. Promotional and advertising activities should be carried on to insure that all potential distributors as well as produce buyers are adequately informed on prospective market supplies and anticipated volumes.
10. All dealers or operators using state market facilities should be required to buy for cash and consignment handling should not be permitted.
11. Wherever they can be justified economically, packing-house facilities and precoolers should be erected on markets and rented out to handlers and marketing associations.

CHAPTER IX

SUMMARY AND RECOMMENDATIONS

Summary

Production of commercial vegetables in Florida increased from the turn of the century to the decade of the 1950's. This increase resulted from expanded sales and distribution made possible by improvements in transportation and in the use of refrigeration. The largest increase in Florida vegetable production occurred in the 1920's, and with this increase growers encountered problems in marketing. There were few organized marketing agencies in Florida and many small growers. Supplies of vegetables were neither dependable and uniform nor were they concentrated geographically for volume operations. The state government, recognizing these grower problems, moved to provide local market facilities for farmers.

In 1929 the Florida State Legislature passed a law which established the State Agricultural Marketing Board. Its intended duties were to organize agricultural and marketing associations and to assist in their operation and

improvement. By 1933 it was evident that this legislation was not effective and it was amended to provide for the erection and operation of state markets as sites for the sale of farm products.

The first State Farmers' Market for vegetables was opened at Sanford, Florida, during the 1934-35 season. Since that time, a total of 40 state markets has been built and operated by the State Agricultural Marketing Board. In January, 1961, ownership and operation of the 18 operating markets were transferred to the Florida Department of Agriculture, Division of Markets.

The State Farmers' Markets were planned to provide convenient meeting places for buyers and sellers and to make available facilities and equipment necessary for the efficient handling and shipping of farm products. At the time of their establishment, these markets provided the best available facilities for that purpose. Most vegetable growers operated small farms, had relatively small volumes of vegetable items, and little opportunity to contact buyers.

During the past two decades, vegetable growing in Florida has progressed to an efficient, highly specialized industry containing fewer but larger farms. There are also

fewer firms, with greater concentration of buying power among the buying, assembling, and distributing organizations of the state and nation. However, it appears that few attempts have been made to adapt state vegetable markets to the changes in marketing practices.

It was the purpose of this study to determine how well State Farmers' Markets selling vegetables served the interests of producers and buyers; why some of these markets have operated successfully, others marginally, and a few have ceased operations; and to identify the factors associated with successful State Farmers' Markets where vegetables are sold. From this information a criterion for vegetable market location and operation has been developed along with a suggested management guide or check list.

The method of study involved reviewing the historical developments of the fresh-produce industry in the United States and Florida, the origin and operations of State Farmers' Markets, and an analysis of State Farmers' Markets where vegetables are sold. Also, surveys of growers and buyers were made to obtain their use and opinions of state vegetable markets.

Considering all State Farmers' Markets and the 26 consolidated annual reports on their operations, it was

shown that: Around 25 per cent of the annual value of Florida-produced vegetables have been sold at State Farmers' Markets; 85 per cent of the annual state market sales were from Florida-grown vegetables, but 95 per cent of the sales were from fresh produce; most of the market income came from produce sales with over one-third coming from produce package fees paid by growers; around 66 per cent of state market expenses were wages and salaries; 13 per cent of the average annual income was retained as profit; .65 per cent of annual sales was the average income, with only .07 per cent of sales the average profit; 60 per cent of nearly 500 market seasons of operation reported a profit; and annual profit averaged 1.1 per cent of the value of fixed assets.

In 1960, there were 18 State Farmers' Markets in operation. They had \$52,140,000 in sales and had a \$4,736,000 value of fixed assets. Profit was \$53,079. Profits have amounted to \$604,467 in 26 years of operation and the average annual profit was \$23,249.

The analysis of state vegetable markets involved 16 markets, of which only 14 were operating in 1960. The 1960 sales of those markets were \$49,417,000; income, \$312,773; profit, \$49,392; and value of fixed assets,

\$4,497,183. They reported a physical volume amounting to about 22,000 carlot equivalents, or 20 per cent of the vegetables produced in Florida.

Profit for the vegetable markets amounted to \$747,819 for 26 years of operation, 24 per cent more than profit from all markets. Average annual profit was \$28,762.

State vegetable markets have been more satisfactory in the southern part of Florida, where vegetable production was most highly concentrated, large-scale, and specialized. In that area, state market sales were larger, with 70 per cent of state vegetable market sales, 20 per cent of the value of vegetable production in Florida, 11 per cent of the physical volume of production in the state, and 66 per cent of the average annual state vegetable market profit.

Leading items reported by state vegetable markets, in order of importance, were: tomatoes, peppers, snap beans, cucumbers, sweet corn, cabbage squash, celery, Irish potatoes, and eggplant.

Success of publicly operated vegetable markets was not easy to define and, as a substitute for "success," operations of relatively high-volume markets were contrasted with those of relatively low-volume markets. This was done because high-volume markets were popular with buyers and

sellers, were considered successful, and most frequently made a profit. The high-volume markets averaged \$7,888,940 in sales per market per year from 1956 through 1960 and the low-volume markets averaged \$130,443 per market. Income for the high-volume markets averaged .5 per cent of sales and for the low-volume markets averaged 2.7 per cent. Profit amounted to \$157,503 per market for the high-volume markets in 23 years, while the low-volume markets had a loss of \$39,757 per market. Average annual profit per market for the high-volume markets was \$10,504 from 1956 through 1960 and average annual loss per market for the low-volume markets was \$3,140 for the same period.

Fixed assets per market for the high-volume markets averaged \$494,871 for the five-year period 1956 through 1960, and \$86,631 for the low-volume markets. Sales per dollar of fixed assets during this period were \$16.28 and \$1.50 for the high- and low-volume markets, respectively. Physical volume during the same time amounted to an average of 3,589 carlot equivalents of vegetables per market per year for the high-volume markets and 70 for the low. Cost of handling vegetables at these two groups of markets during the period being considered averaged \$12.17 per carlot equivalent for the high-volume markets and \$95.82 per carlot equivalent for the other markets.

Length of operating season averaged 180 days per market for high-volume markets and 106 days for low-volume markets, but during this time the first group averaged 20 carlot equivalents of vegetables per day and the second group averaged only .7 carlot equivalent.

The high-volume markets had fewer farms per market than did the low-volume markets; but, for the average farm size, farms reporting vegetables, average acres of vegetables, proportion of farms reporting vegetables, and proportion of farm land in vegetables, the high-volume markets had the larger figures on a per-market basis.

Market facilities and management were found to be important to market operation. High-volume markets received 32 per cent of their income from package fees, 23 per cent from platform rentals, 19 per cent from packing-house rentals, and 12 per cent from office rentals. Low-volume markets received 60 per cent of income from package fees, 7 per cent from platform rentals, 12 per cent from packing-house rentals, and 1 per cent from office rentals.

Growers and buyers interviewed indicated that perhaps managers of state vegetable markets are not maintaining adequate communications with patrons for the best interest of market operations. Both groups gave their

appraisal of market operations, their problems, and suggestions for improvements.

Recommendations

The fundamentals for state market activities were found in the authorizing statutes and were maintained in the Florida Department of Agriculture reorganization bill. State marketing personnel were to assist in all phases of marketing, handling, and distribution. They were to carry on research work or to cooperate with other agencies in research on marketing. Also, they were to provide the marketing information necessary for the efficient selling of farm products. Some of the functions provided for in the statutes have not been implemented. Acquiring land and erecting marketing facilities were authorized for the marketing program along with market operations. It has been this phase only that captured the imagination of state marketing personnel, and state markets appeared in a "helter-skelter" pattern throughout the state. One-half of the market facilities erected have been abandoned. Nearly one-half of those remaining should be abandoned or merged.

In some areas, grower self-improvement organizations and state markets are not compatible. As long as state

market managers seek volume and income, it is only natural that they oppose grower organizations not operating within the framework of the state market system. State market managers have apparently tried, in some cases, to prevent formation of grower organizations. This was not the intent of the program. Ways must be found for market managers and grower organizations to work together. If self-reliant, aggressive growers should be encouraged to consolidate their sales efforts in an attempt to gain bargaining power with volume buyers, then it may be advisable to place facilities at certain low-volume state markets in the hands of grower organizations for operation at low-rental rates. Any savings should be rebated to users on a pro rata basis. In low-volume market areas where growers are not interested in organizing to operate the market, the state market facility should be closed or leased to a private farm produce assembly agent on an open-bid basis.

If sizeable numbers of growers insist that state markets continue to provide outlets for vegetables, then state operations probably will be continued. In that case, state markets' operating policies and programs should be subject to local influence through advisory committees made up of growers, buyers, and transportation people. The County

Agricultural Agents should serve as ex-officio committee members. These committees should have some positive influence and authority over market operating procedures. The committee delegates should be elected from their respective groups and only market patrons permitted to vote or serve on committees.

The duties and obligations of each committee should be clearly defined as to its authority and objectives. Local committees should be composed of members who are active in only one phase of market patronage. The representation on local committees should be based on the number of market patrons in each classification. Local grower organizations should be responsible for seeing that there is a market advisory committee and that it functions properly.

A state advisory committee should be made up of one elected delegate from each market committee. This state committee should influence administrative decisions at the state level so that they would benefit local markets from the user's standpoint. Otherwise, market patrons' interests will not be served. Some state farm organization should be responsible for seeing that there is a state advisory committee and that it functions properly.

In order to lower operating costs, market managers should be eliminated when feasible at low-volume markets. This would depend upon the individual market and the degree of operating authority assumed by local organizations. A traveling market supervisor, with several markets under his jurisdiction, could handle adequately the leasing, accounting, and maintenance problems with the help of a grower organization secretary at each market during operating periods.

To accurately measure market facility utilization, operating reports should include only those items brought to and sold at the state market. The practice of including, in market statements, all items and values of loads originating in a community around a state market should be discontinued. Many loads reported as sold at state markets are not actually sold on such markets.

In two instances, two state vegetable markets are located within 35 miles of each other. Careful appraisal of these markets should be made and thorough market research conducted to determine the actual need and the possibility of merger.

Criteria for establishing and operating State Farmers' Markets for vegetables, along with a management and

market evaluation check list, have been developed in Chapter VIII. If state vegetable markets are to be legally justified, socially acceptable, and economically defensible, such criteria should be adhered to impartially. Fearlessly applied, these criteria and check list will enhance the reputation of state market operations, and bring about improvements in marketing methods, efficiency, and handling procedures.

APPENDIX

TABLE 127.—Acreage, production, and value of commercial vegetables for fresh market, United States, 1925-60^a

Year	Acreage for Harvest	Production	Farm Value
	(1,000 Acres)	(1,000 Cwt.)	(\$1,000)
1925	4,562	309,433	819,311
1926	4,675	333,687	722,667
1927	5,220	375,558	689,378
1928	5,563	399,168	550,884
1929	5,266	361,568	792,476
1930	5,520	362,696	628,985
1931	6,071	390,659	446,243
1932	6,449	397,230	357,199
1933	6,064	358,006	508,460
1934	6,483	413,894	433,389
1935	6,268	395,633	490,283
1936	5,677	354,543	646,588
1937	5,677	393,116	493,174
1938	5,570	389,191	457,032
1939	5,643	389,618	538,050
1940	5,507	406,542	509,482
1941	5,424	393,723	664,118
1942	5,312	413,110	925,459
1943	5,938	466,042	1,371,547
1944	5,638	445,470	1,295,101
1945	5,451	470,331	1,420,894
1946	5,473	523,758	1,393,025
1947	4,661	437,150	1,452,227
1948	4,526	478,828	1,476,381
1949	4,483	456,934	1,323,828
1950	4,462	489,182	1,157,221
1951	3,753	405,376	1,420,236
1952	3,812	422,874	1,674,201
1953	4,024	459,913	1,179,545
1954	3,916	447,120	1,321,449
1955	3,898	460,285	1,303,894

TABLE 127.--Continued

Year	Acreage for Harvest	Production	Farm Value
	(1,000 Acres)	(1,000 Cwt.)	(\$1,000)
1956	3,802	483,061	1,418,024
1957	3,782	464,623	1,431,870
1958	3,855	496,186	1,215,008
1959	3,683	470,594	1,458,026
1960	3,652	493,000	1,489,257

Sources: Calculated from U. S., Department of Agriculture, Commercial Vegetables, Statistical Bulletin No. 126; U. S., Department of Agriculture, Vegetables for Fresh Market, Statistical Bulletin No. 212; U. S., Department of Agriculture, Sweetpotatoes, Statistical Bulletin No. 237; U. S., Department of Agriculture, Vegetables -- Fresh Market, Annual Summaries, 1957-60; U. S., Department of Agriculture, Agricultural Statistics, 1936-61.

^aIncludes melons, Irish potatoes, strawberries, and sweet potatoes.

STATE LEGISLATIVE ACTS

Creation of Agricultural Marketing Board - 1929

Laws of Florida, 1929, General Laws, Volume 1, Chapter 13809, No. 245, page 630:

"AN ACT to create a Board consisting of the Governor, the Commissioner of Agriculture, and the State Marketing Commissioner to be known as the State Agricultural Marketing Board, to Define its Duties and Powers and make appropriation for the carrying out of the provisions thereof.

"BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA:

"Section 1. There is hereby created a State Agricultural Marketing Board to consist of the Governor of the State, the Commissioner of Agriculture and the State Marketing Commissioner, the duties of which shall be to further extend the activities of the State Marketing Bureau in the organization of agricultural and marketing associations, to give instruction in the operation of same; to aid, promote and foster those already operating; to extend market news service and crop reports, to locate markets and buyers, to instruct in the standardization, grading, packing, processing, loading, refrigeration, routing, diversion, and distribution of farm products; to carry on research work in marketing and to provide any other information and assistance necessary to efficient selling of farm products.

"Section 2. The State Agricultural Marketing Board shall have power and is hereby authorized to employ such assistants as are necessary to the State Marketing Commissioner, to fix their compensation and traveling expenses; to employ such clerical help and to provide and maintain such additional office space to the State Marketing Bureau as may be necessary to carry out the provisions of this Act.

"Section 3. That the sum of Thirty-five Thousand Dollars be and the same is hereby annually appropriated out of the General Inspection Fund to defray the expenses

necessary in carrying out the provisions of this Act.

"Section 4. All laws and parts of laws in conflict with this Act are hereby repealed.

"Section 5. This Act shall take effect upon its becoming a law.

"Approved May 29, A. D. 1929."

Authority to Own and Operate Markets

Laws of Florida, 1933, General Laws, Volume 1, Chapter 15860, No. 5, page 22, Senate Bill No. 337:

"AN ACT amending Section 1, of Chapter 13809 Laws of Florida, Acts of 1929, relating to the creation of the State Agricultural Marketing Board, defining its powers and duties and making appropriation therefor.

"BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA:

"Section 1. Section 1 of Chapter 13809, Laws of Florida, Acts of 1929 be and the same is hereby amended to read as follows:

"Section 1. There is hereby created a State Agricultural Marketing Board to consist of the Governor of the State, the Commissioner of Agriculture and the State Marketing Commissioner, the duties and powers of which shall be to further extend the activities of the State Marketing Bureau in the organization of agricultural and marketing associations; to give instruction in the operation of same; to aid, promote and foster those already operating; to extend market news service and crop reports; to locate markets and buyers; to instruct in the standardization, grading, packing, processing, loading, refrigeration, routing, diversion, and distribution of farm products; to carry on research work in marketing and to provide any other information and assistance necessary to efficient selling of farm products; to purchase suitable sites and erect thereon assembling plants and properly equip same for the handling of all staple field crops, meats, poultry and dairy products; to purchase and hold for use in the various state institutions any supplies available for this purpose; to store, refrigerate, or process any meats, poultry and dairy products; to provide for producing mixed feeds; to employ such manager and other help as is necessary to operate the plant and market the materials handled; make such charges for service as will cover the cost of operation, and deposit such collections with the State Treasurer to be paid out by warrants issued on requisitions of the State

Agricultural Marketing Board, filed with the State Comptroller; to build pens convenient to such plants as are necessary for the loading of livestock. The funds necessary to defray the expense of erecting and equipping the plant or plants shall be expended from the General Inspection Fund: Provided that only such funds shall be used for the erection and equipping of these plants as are available after all other needs of the Department of Agriculture have been provided for as per appropriation during each fiscal year.

"Section 2. All laws and parts of laws in conflict with this Act are hereby repealed.

"Section 3. This Act shall take effect upon its becoming a law.

"Approved June 10, 1933."

Establishment of Citrus Washing Houses

Laws of Florida, 1939, General Laws, Volume 1, Chapter 19472, No. 477, page 1141, House Bill No. 979:

"AN ACT requiring the State Agricultural Marketing Board to Establish Houses where Citrus May be Washed, Polished and Graded for Shipments and Placing a Limitation on the Time Such Houses Shall be Operated; Authorizing the State Agricultural Marketing Board to Make Rules and Regulations to Carry out the Purpose of this Act; Describe the Places where Said Houses Shall be Located and Making Appropriations for the Purposes of this Act.

"BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA:

"Section 1. The State Agricultural Marketing Board is hereby required to establish, and have in operation before the first day of December, 1939, three establishments or houses to be used for the purpose of washing, grading and/or polishing citrus fruit. Said Board is authorized and required to purchase such equipment as is necessary for this purpose. The Board is further authorized, if it is deemed necessary, to establish other places for the same purpose expressed in this Act.

"Section 2. The three establishments mandatorily required under this Act shall be located as follows:

One house to be located in Duval County, Florida, near the intersection of U. S. Highway No. 41 and U. S. Highway No. 17;

One house to be located in Columbia County, Florida, near the intersection of U. S. Highway No. 41 and U. S. Highway No. 441;

One house to be located in Levy County, Florida, adjacent to U. S. Highway No. 19.

Other establishments selected by the Board shall be placed where the Board deems most advisable.

"Section 3. The State Agricultural Marketing Board shall operate the houses established under this Act for the purpose of enabling citrus growers or truck buyers handling citrus fruit to have bulk shipments or fruit in bags or similar containers (but not in wooden boxes) washed and graded and, if desired by the owner of the fruit, polished. All processing shall be done at actual cost to the grower or owner, plus one cent for quantity equal to one standard citrus box, which one cent shall be used by the State Agricultural Marketing Board to pay for the cost of equipment and construction necessary to carry out the provisions of this Act and for maintenance and replacement costs.

"Section 4. The State Agricultural Marketing Board shall have authority to make rules and regulations to carry out the provisions of this Act.

"Section 5. The establishments created under this Act shall begin operations on the first day of December of each year and cease operations on June 1 of each year.

"Section 6. All fruit processed under this Act shall be inspected as now or hereafter required by any State or Federal law, rule or regulation relative to the handling, processing or marketing of citrus fruits, and the owner shall pay all advertising taxes required by law.

"Section 7. For the purpose of carrying out the provisions of this Act the State Agricultural Marketing Board shall use from the General Inspection Fund the sum of Fifty Thousand (\$50,000) Dollars or any part thereof, and there is hereby specifically appropriated said sum of money for this purpose from the General Inspection Fund.

"Section 8. This Act shall take effect immediately upon becoming a law."

Became a law without the Governor's approval.

Filed in office of the Secretary of State,
June 12, 1939.

Authorizing a Director of State Markets

Laws of Florida, 1941, General Laws, Volume 1, Chapter 20345, No. 137, page 543, Senate Bill No. 253:

"AN ACT to amend Section 1 of Chapter 13809, Laws of Florida, Acts of 1929, as amended by Chapter 15860, Laws of Florida, Acts of 1933, Relating to the creation of a Board consisting of the Governor, the Commissioner of Agriculture, and the State Marketing Commissioner known as the State Agricultural Marketing Board, Defining its duties and Powers, and Providing for Carrying Out the Provisions Thereof.

"BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA:

"Section 1. That Section 1 of Chapter 13809, Laws of Florida, Acts of 1929, as amended by Chapter 15860, Laws of Florida, Acts of 1933, be and the same hereby is amended to read as follows:

"Section 1. There is hereby created a State Agricultural Marketing Board to consist of the Governor of Florida, the Commissioner of Agriculture, and the State Marketing Commissioner, the duties and powers of which shall be to instruct in the standardization, grading, packing, processing, loading, refrigeration, routing, diversion, and distribution of farm products; to carry on research work or cooperate with other State and Federal Agricultural Agencies on research work in marketing and to provide any other information and assistance necessary to the efficient selling of farm products; to acquire suitable sites and erect thereon necessary marketing facilities, livestock pens and properly equip, maintain and operate same for the handling of all staple field crops, meats, fruits and vegetables, poultry and dairy products, and all farm and home products, and for selling and loading livestock, and to let or lease space therein and thereon; to purchase and hold for use in the various State Institutions any supplies available for this purpose: to store, or refrigerate any meats, vegetables, fruits, poultry, or dairy products; to employ such managers and other help as may be necessary to operate the plants and pens and market the products handled, and make such charges

for such services as will cover the cost of operation and maintenance; to operate bonded warehouses where commercial facilities are not available for the purpose of storing warehousing and holding products of the farm and field, meats, poultry and eggs and to issue negotiable warehouse receipts therefor, and make reasonable charges for such services sufficient to cover the cost of such operations and maintenance. All collections made for charges shall be deposited monthly with the State Treasurer to the credit of the General Inspection Fund, Special State Farmers' Market Account, the same to be used toward the payment of the expenses of operation and maintenance and equipment herein provided for, and to be paid out by warrants issued on requisitions of the Director of State Markets, approved for payment by the Commissioner of Agriculture of Florida, filed with the State Comptroller. Any additional funds necessary to defray the expenses of erecting equipping, maintaining and operating plants and pens shall be expended from the General Inspection Fund, provided that only such funds shall be used for the erection and equipment of plants and pens as are available after all other needs of the Department of Agriculture have been provided for. The State Agricultural Marketing Board shall have power and is hereby authorized to employ a Director and such technical and clerical help and assistants as may be necessary to execute and carry out the interest and purpose of this Act, to fix their compensation and traveling expenses which shall be paid from the General Inspection Fund, and to provide sufficient office space therefor.

"Section 1A. The provisions of this Act shall not be applicable to the institutions of higher learning of this State.

"Section 2. All laws and parts of laws in conflict are hereby repealed.

"Section 3. This Act shall take effect upon becoming a law.

"Approved by the Governor, May 19, 1941."

Filed in the Office of the Secretary of State,
May 20, 1941.

Authorization for Additional Livestock Markets

Laws of Florida, 1941, General Laws, Volume 1, Chapter 20987, No. 779, page 2619, House Bill No. 768:

"AN ACT Appropriating Twenty-Five Thousand Dollars for Use by the State Agricultural Marketing Board in Establishing and Maintaining in the State of Florida a Market for the Selling and Processing of Livestock.

"Whereas, the raising of livestock has increased at a rapid rate during the past few years and the value of the annual sales therefrom has become of major importance to the economic life of the State, and

"Whereas, the State of Florida has, through the establishment of auction markets, done much to aid and assist the orderly development of the raising of livestock and

"Whereas, the livestock business has now reached a point where it is highly desirable that the marketing thereof be further developed by the State through the establishment of additional facilities for the selling and processing of livestock, and

"Whereas, these purposes can best be served by the construction and operation of a livestock market primarily for the benefit of the producers of livestock and one that will operate a processing plant in connection therewith, and will establish official market grades and official market quotations as to the market prices.

NOW, THEREFORE

"BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA:

"Section 1. That the sum of Twenty-Five Thousand Dollars be and the same is hereby appropriated out of any funds in the State Treasury not otherwise appropriated for use by the State Agricultural Marketing Board of the State of Florida in establishing and maintaining in the State of Florida a market for the selling of livestock. The market

so established shall be operated pursuant to law under the directions of the State Agricultural Marketing Board.

"Section 2. This Act shall take effect immediately upon becoming a law.

"Approved by the Governor, June 14, 1941."

Filed in the Office of the Secretary of State,
June 16, 1941.

Establishment of Board of Directors for
Central Florida State Farmers' Market
at Ocala

Laws of Florida, 1943, General Laws, Volume 1, Chapter
22055, No. 421, page 811, Senate Bill No. 615:

"AN ACT Creating a Board to be known as 'Directors of Central Florida State Farmers' Market at Ocala,' to be operated under the Supervision and Control of the State Agricultural Marketing Board Created by Section 603.16 Florida Statutes, 1941; Defining Its Powers and Duties, and Providing for Carrying Out the Provisions Hereof.

"Whereas, Central Florida State Farmers' Market at Ocala, Marion County, Florida, is operated by the State Agricultural Marketing Board upon lands owned jointly by the State Agricultural Marketing Board and by Marion County, a political subdivision of the State of Florida, which has likewise contributed to the cost of improvements thereon and it is desirable that the active management thereof be committed to the agency hereinafter created"

Authorization to Sell or Dispose of Real
or Personal Property

Laws of Florida, 1947, General Laws, Volume 1, Chapter
23803, No. 189, page 369, House Bill No. 89:

"AN ACT Authorizing the State Agricultural Marketing Board of Florida to Sell, Exchange, Convey or Otherwise Dispose of Any Land, Real Property, or Personal Property Owned or Held by Said Board when Not Needed for the Purpose for which the Said Board Was Created"

MARKET RULES AND REGULATIONSFLORIDA STATE FARMERS' MARKETS
HEADQUARTERS

Florida Citrus Building
P. O. Box 1191, Winter Haven, Florida

1. This Market is owned by the State of Florida and is controlled by the State Agricultural Marketing Board, which consists of the Governor, the Commissioner of Agriculture, and the State Marketing Commissioner.
2. The State Agricultural Marketing Board was created by an Act of the Legislature as recorded in Section 13809, Laws of Florida, Acts of 1929, and as amended by the Legislative Session of 1933.
3. The Board has appointed a Director as Executive Officer of the State Farmers' Market, to promote, construct, organize, operate, and supervise the markets. The Board has also authorized the Director to appoint such assistants as he finds necessary.
4. The Director has appointed a Manager of the Local Market to promote, operate, and supervise the activities of the Market. The Market Manager may or may not choose an Advisory Committee to aid him in making decisions for the betterment of the market. If an Advisory Committee is chosen, it has no legal status but acts in an advisory capacity only.
5. Method of choosing an Advisory Committee and qualifications of committeemen:
 - a. All members of the Committee must be growers who patronize the market except that the County Agent or Agents, in the area served by the market, may be invited to be an Ex-Officio member of the Committee. If at any time a member of the Committee ceases to be a grower or ceases to patronize the market, he is automatically dropped from the Committee, and another man will be appointed to take

his place. Business men actively engaged in buying, processing, or handling produce on the market may be invited to attend Committee Meetings and to participate in the discussion of the problems pertaining to the operation of the market.

- b. The original Committee will be appointed by the Director upon the recommendation of the Market Manager, half of which to be appointed for one year and half to be appointed for two years.
- c. All succeeding appointments will be made by the Director upon the recommendation of the existing committee for a period of two years, except appointments to fill unexpired appointments which will be for the length of the unexpired appointment. The existing Committee will select their recommendations for new appointments in the following manner. The Market Manager and Committee Chairman together will put before the Committee a list of names from which the Committee will select their recommendations to the Director of State Markets.
- d. Upon the change of a Market Manager, appointments of all Committee members will expire immediately and a new Committee will be recommended to the Director by the new Market Manager if and when he so desires.

6. Requirements of Buyers:

- a. All buyers must register at the market office before buying on the market.
- b. All buyers must have a State License and bond except those paying by currency.
- c. All buyers must sign showing they received a copy of the rules and regulations.

7. Requirements of Growers:

- a. A copy of the rules and regulations will be posted on the Bulletin Board at all times. A copy of the rules and regulations of the market will be available and the growers must abide by these rules and regulations.

8. All traffic is required to observe signs of direction or other directions of the Market Manager as to lanes of traffic, selling areas, and parking areas.
9. Gambling in any form is prohibited on market property.
10. Method of Selling. See local rules of market.
11. Hours of Operation. See local rules of market.
12. These general rules shall be made a part of all local rules of all State Farmers' Markets.

RULES FOR AUCTIONFLORIDA STATE FARMERS' MARKETS
HEADQUARTERS

Florida Citrus Building
P. O. Box 1191, Winter Haven, Florida

1. Any person using the markets must agree to comply with the rules herein described, to obey the directions of the market managers, and not interfere with the manager or his assistants when they are working in their line of duty.
2. No person shall offer his produce for sale at the market in any other place than in the driveway designated by the market manager. He shall enter the market at the designated place, keep in line and offer his load in turn.
3. No person shall "cut in" ahead of another previously in line.
4. No person shall sell or offer for sale, either in open or closed packages, any fruits or vegetables which are packed in such a way that the face or surface shown shall not be a reasonable representation of the contents of the package, and the package or packages exhibited shall be representative of the lot.
5. Buyers are requested to have their produce examined at the unloading point.
6. Any person offering his produce for sale may refuse the bid offered providing that he does so before leaving the block.
7. Any person who accepts a sales ticket and leaves the block shall be bound by the sale.
8. A buyer shall be bound to the sale by the act of giving his bid and receiving, without objection, the announcement that the load is knocked down to him.

9. Any grower or buyer who is barred from one of the State Markets shall be barred from all of the Markets in the system.
10. All buyers shall be required to register with the Market office before they will be permitted to buy.

**SCHEDULE ON STATE FARMERS'
MARKETS WHERE VEGETABLES ARE SOLD**

University of Florida
Department of Agricultural Economics
Gainesville, Florida

CONFIDENTIAL INFORMATION

Enumerator _____

Date _____

1. Growers' Name _____
 Address _____
 County _____
 Location of Farm _____
 Location of Residence _____
2. How long have you produced vegetables in this area? _____
3. How many acres of vegetables (potatoes, melons and berries) did you have this season? _____
4. Do you know of the _____ State Farmers' Market?
 Yes _____; No _____. (If yes continue)
5. Would you mind discussing the _____ State Farmers' Market with me? Yes _____; No _____ (If yes continue)
6. What do you think of the _____ State Farmers' Market operation? Excellent _____ Good _____ Fair _____ Poor _____
 What makes you feel this way? _____

10. (If all vegetables were not taken to the State Market)

why weren't all your vegetables sold at the State

Farmers' Market? _____

11. Have you always used the _____ State Farmers' Market

to sell vegetables? Yes _____; No _____. (If no) how

long have you sold vegetables there? _____

Why didn't use it before? _____

What got you started using the Farmers' Market? _____

Have you been better pleased with your selling at the

Farmers' Market than with your previous arrangements?

Yes _____; No _____. (If yes) how? (If no) why? _____

12. Would you like to see some changes made for selling your

vegetables at the State Farmers' Market? Yes _____;

No _____. (If yes) what? _____

(If none to question number 9c, start here)

13. Would you mind telling why you sold no vegetables at the

Farmers' Market this season? Yes _____; No _____. (If

no) why didn't you sell vegetables at the Farmers' _____

Market? _____

14. If some changes were made in the _____ State Farmers' Market operations would you consider selling there?

Yes _____; No _____. (If yes) what changes? _____

15. Have you ever sold any vegetables at the _____ State Farmers' Market? Yes _____; No _____. (If yes) what years? _____
- _____
- _____

Why did you use it then? _____

What caused you to stop using it? _____

Have you been better pleased with your selling arrangements since you stopped using the Farmers' Market?

Yes _____; No _____. (If yes) how? (If no) why? _____

BUYERS'
SCHEDULE ON STATE FARMERS'
MARKETS WHERE VEGETABLES ARE SOLD

University of Florida
Department of Agricultural Economics
Gainesville, Florida

CONFIDENTIAL INFORMATION

Enumerator _____

Date _____

1. Buyers' Name _____
Company Name _____
2. How would you describe the _____ State Farmers' Market as a place to buy produce? _____

3. Are buyers and growers treated fairly at the market? _____

4. What are the greatest problems experienced in this market by: (a) Buyers? _____

(b) Growers? _____

5. Would you rather buy directly from growers or from growers' agents? _____

6. What method of trade or market practices do you prefer for buying produce? _____

7. What is your idea of an ideal method of buying produce? _____

8. If you were to become market manager of this market, what changes would you work for? _____

9. If you were a grower in this area, how would you sell your vegetables? _____

10. What changes do you see for vegetable marketing in the future for this area? _____

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
State of Florida

605 S. W. 26th St.
Fort Lauderdale, Fla.
November 18, 1959

Reply to:
November 18, 1959

TO: Bean Growers Who Signed the Grower's Agreement

As per request from this group, I am enclosing material which will bring you up to date.

Mr. Harvey Cheshire called this morning and gave the report on the joint meeting of the Buyers' and Growers' Association which was held in Pompano last night.

Some of the buyers went so far as to suggest that they bid on each truck load as it comes in and that the association Members boycott any brokers that did not stop booking on all commodities.

The outcome of the meeting, according to Mr. Cheshire, was that the Buyers' Association (which does not include the chain buyers) is against booking of any commodity.

Some of the brokers present stated that for some of their farmers they would have to book because the farmers wanted them to, but that they would go along with the group.

I am trying to bring each of you up to date by means
of this letter.

Sincerely,

/s/ Robert S. Pryor

ROBERT S. PRYOR
County Agent

RSP:v

Bean Growers' Agreement and Instructions to Their Selling
Brokers

Effective November 20, 1959

Whereas, we believe the Pompano Farmers' Market is the best in the State of Florida.

Whereas, we believe it would improve this market to stop all "booking" of beans.

Whereas, we the undersigned growers of "beans" in the Pompano and East Palm Beach Area are selling over this market through our individual brokers.

Whereas, we represent 75 % of the expected bean acreage of Broward and East Palm Beach Counties which will be sold over the Pompano State Farmers' Market.

Therefore, we hereby join together collectively and in unison demand that all our brokers under no circumstances sell any of our beans by "booking." All sales shall be for a dollar and cents value. No sale of our beans to be consummated -- (any other buyer can buy) until one buyer gives our broker an exact dollar and cents bid which is binding at instant of bid.

We hereby demand that our broker honor no bids for future delivery of any beans at an undetermined price.

Therefore, by signature, we agree to the above, and agree not to change orders to our broker in regard to

selling until after a called meeting of the below signers at which meeting we agree to abide by the decision of a two-thirds vote of the signers. Names and addresses of all signers shall be furnished each signer.

TO: Buyers of Green Beans Buying at Pompano State Farmers' Market, Pompano Beach, Florida

We, the undersigned bean growers of Broward County and East Palm Beach County, who have our beans sold on the Pompano State Farmers' Market, have held two joint meetings for the purpose of deciding selling policies on the Pompano State Farmers' Market.

After much discussion and consideration, we have come to the conclusion that the sale of beans by the practice of "Booking" at an undetermined dollar and cent price is a bad and unfair practice for both the farmer and the buyer for the following reasons:

1. It does not give all buyers an equal chance to purchase a given lot of beans.
2. It puts responsibility of establishment of price on a lesser number of sellers.
3. This practice eliminates bargaining power of seller.
4. We believe that by eliminating this practice we will have a more active market which will be beneficial to both buyers and bean growers.
5. It will help to establish going prices at an earlier hour in the day which will make for fairer dealings for all concerned.

We, the undersigned grower, believe we have a fine group of brokers and buyers and have confidence in the same. We want to see the Pompano State Farmers' Market continue to operate on a profitable basis to all concerned, and have, therefore, agreed and notified our selling brokers to stop the practice of disposing of our beans by "Booking" as of November 20, 1959.

We hereby earnestly solicit the wholehearted cooperation of each and every buyer to aid and assist us in this change of selling practice for the betterment of all concerned.

We, the undersigned growers, represent approximately 75% of the expected total acreage of beans to be planted this season in Broward and East Palm Beach Counties which will be sold over the Pompano Market.

Continuation of Bean Growers' Agreement and Instructions to
Their Selling Brokers Effective November 20, 1959

Any three signers may ask for a call meeting by notifying either of the County Agents of Broward or Palm Beach Counties, and they, in turn, will notify all signers of time and place of meeting by phone or by personal contact.

We hereby notify our broker to carry out this agreement and make no change unless he receives a similar written notice superseding these instructions.

Name and Address

G. E. Jones
P. O. Box 367
Deerfield Beach, Fla.

Whitworth Bros.
John I. Whitworth
200 N.E. 11th Ave.
Pompano Beach, Fla.

Warren Parrish
Parrish Farms
501 N.E. 12th Ave.
Pompano Beach, Fla.

H. D. Hinson
Hinson Bros.
Box 773
Deerfield Beach, Fla.

H. H. White
Seminole Farm
Box 1032
Pompano Beach, Fla.

Spear Bros.
Niel Spear
1209 N.E. 7th St.
Pompano Beach, Fla.

Name and Address

Harbuck & Liedeman
Leon Harbuck
Box A717
Oakland Park, Fla.

E. R. Crossman
641 Gardenia Lane
Plantation
Ft. Lauderdale, Fla.

Russell M. Cheshire
Route #1, Box 625
Pompano Beach, Fla.

Robert Mott
Vicker Farm
Box 321
Deerfield Beach, Fla.

C. M. Cook, Jr.
1348 N.E. 25th Ct.
Pompano Beach, Fla.

Virgil Green
508 N.E. 11th Ave.
Pompano Beach, Fla.

Name and Address

Milton Skeen
496 N.W. 43rd St.
Ft. Lauderdale,
Fla.

W. W. Cheshire
1003 Atlantic Blvd.
Pompano Beach, Fla.

E. L. Garner
720 Flagler Ave.
Pompano Beach, Fla.

Contacted later:

C. W. Smith
L. Gibbs

Thomas Brothers
John J. Thomas
129 N.W. 11th St.
Pompano Beach, Fla.

BIBLIOGRAPHY

Automobile Manufacturers Association. Motor Truck Facts. Detroit, Michigan, 1959.

Agricultural Extension Service, University of Florida. Florida Vegetables, 1961-62 Acreage-Marketing Guide. Gainesville, Florida, 1961. (Mimeographed.)

Beckman, T. N., and Engle, N. H. Wholesaling Principles and Practices. Rev. ed. New York: The Ronald Press Company, 1949.

Cake, E. W. Some Facts concerning Country Fruit and Vegetable Auctions in Eastern Seaboard States. Cornell University Agricultural Experiment Station Bulletin No. 737. Ithaca, N. Y.: Cornell University, 1940.

"Chain Stores Shortening Farm-to-Mart Channels," Tampa Tribune, January 30, 1960, p. 4-A.

Clark, F. E., and Weld, L. D. H. Marketing Agricultural Products. New York: The Macmillan Co., 1932.

Clark, F. E., and Clark, C. P. Principles of Marketing. 3rd ed. New York: The Macmillan Co., 1942.

Cox, J. A. "Production of Irish Potatoes in Marl Soils of South Florida," Proceedings of the Florida State Horticultural Society, 1954.

Ensign, M. R. Grading, Packing, and Stowing Florida Produce. Agricultural Experiment Station Bulletin No. 254. Gainesville, Florida: University of Florida, 1932.

Ensign, M. R. "What Price Celery?" Unpublished Paper. Gainesville, Florida: University of Florida, Vegetable Crops Department files, 1926.

Florida, Agricultural Statistics, 1890. Tallahassee, Florida: Department of Agriculture, 1892.

_____. 8th Biennial Report of Florida State Marketing Bureau, March, 1933. Jacksonville, Florida.

_____. 9th Biennial Report of Florida State Marketing Bureau, March, 1935. Jacksonville, Florida.

_____. 21st Biennial Report of the Department of Agriculture, 1930. Tallahassee, Florida.

_____. 27th Biennial Report of the Department of Agriculture, 1942. Tallahassee, Florida.

_____. Journal of the Senate, 1929. Tallahassee, Florida.

_____. Laws of Florida, 1929. General Laws, Volume 1, Chapter 13809, No. 245. Tallahassee, Florida, 1929.

_____. Laws of Florida, 1933. General Laws, Volume 1, Chapter 15860, No. 5. Tallahassee, Florida, 1933.

_____. Laws of Florida, 1939. General Laws, Volume 1, Chapter 19472, No. 477. Tallahassee, Florida, 1939.

_____. Laws of Florida, 1941. General Laws, Volume 1, Chapter 20345. Tallahassee, Florida, 1941.

_____. Laws of Florida, 1941. General Laws, Volume 1, Chapter 20987. Tallahassee, Florida, 1941.

_____. Laws of Florida, 1943. General Laws, Volume 1, Chapter 22055. Tallahassee, Florida, 1943.

_____. Laws of Florida, 1947. General Laws, Volume 1, Chapter 23803. Tallahassee, Florida, 1947.

_____. Laws of Florida, 1959. General Laws, Volume 1, Chapter 59-54, Tallahassee, Florida, 1959.

_____. Agricultural Experiment Station. A Study of the Cost of Transportation of Florida Citrus Fruits with Comparative Costs from Other Producing Areas. Bulletin No. 217. Gainesville, Florida: University of Florida, 1930.

- _____, Department of Agriculture. Reports of the Commissioner of Agriculture, 1901, 1911 and 1912, 1920. Tallahassee, Florida: Department of Agriculture, 1901, 1913, 1921.
- _____, State Agricultural Marketing Board. Annual Reports, 1930-60. Jacksonville, Florida, 1930-60.
- _____, State Agricultural Marketing Board. Minutes of Meeting, October 24, 1939. Tallahassee, Florida: Files of the State Marketing Bureau.
- _____, State Marketing Bureau. Annual Agricultural Statistical Summaries, 1952-60. Jacksonville, Florida: State Marketing Bureau, 1952-60.
- Horner, J. T. Agricultural Marketing. New York: John Wiley & Sons, Inc., 1925.
- Leon County, Florida, Circuit Court case. Colonial Oil Company vs. Nathan Mayo, et al. Files of the Attorney General's Office.
- Maloney, C. B. Marketing Florida Citrus Fruits. Gainesville, Florida: University of Florida, 1918.
- Mayo, Nathan. Florida. Tallahassee, Florida: Florida Department of Agriculture, 1928.
- Myers, A. L. Agriculture and the National Economy. U. S. Senate Temporary National Economic Committee Monograph No. 23. Washington: U. S. Government Printing Office, 1940.
- North Carolina State College. Vegetable Market Structure Classes in the South-east. A. E. Information Service No. 35. Raleigh, North Carolina, 1954.
- Nourse, E. G. The Chicago Produce Market. Boston: Houghton Mifflin Company, 1918.
- Powell, G. H. Cooperation in Agriculture. New York: The Macmillan Co., 1918.
- Relfs, P. H. "Founders of Florida Horticulture," Proceedings of the Florida State Horticulture Society, 1935.

Shepherd, G. S. Marketing Farm Products. Ames, Iowa: Iowa College Press, 1946.

Sherman, W. A. Merchandising Fruits and Vegetables. New York: A. W. Shaw Co., 1928.

Speer, H. L. "The Vegetable Deal in the Muck Lands of Palm Beach County," Proceedings of the Florida State Horticultural Society, 1951.

Thompson, H. C. Vegetable Crops. Vols. I and II. New York: McGraw-Hill Book Co., Inc., 1923 and 1931.

U. S., Department of Agriculture. Agricultural Statistics, 1936-61. Washington: U. S. Government Printing Office, 1936-61.

_____. Commercial Truck Crops: Estimates of Acreage, Production and Value, 1918-41. Washington: BAE Mimeos, 1918-41.

_____. Commercial Vegetables. Statistical Bulletin No. 126. Washington: U. S. Government Printing Office, 1953.

_____. Concentration Markets for Fruits and Vegetables in Sumter and Lake Counties, Florida. Washington: Production and Marketing Administration, 1949. (Mimeographed.)

_____. Cooperative Fruit and Vegetable Shipping-Point Auctions. Farm Credit Administration Bulletin No. 64. Washington: U. S. Government Printing Office, 1951.

_____. Farmers' Bulletin No. 707. Washington: U. S. Government Printing Office, 1916.

_____. Farmers' Produce Markets in the United States. Part III. Marketing Research Report No. 17. Washington: U. S. Government Printing Office, 1952.

_____. Standardization and Inspection of Fresh Fruits and Vegetables. Agricultural Marketing Service, Miscellaneous Publication No. 604. Washington: U. S. Government Printing Office, 1956.

- _____. Sweetpotatoes. Statistical Bulletin No. 237. Washington: U. S. Government Printing Office, 1958.
- _____. Vegetables for Fresh Market. Statistical Bulletin No. 212. Washington: U. S. Government Printing Office, 1957.
- _____. Vegetables -- Fresh Market. Annual Summaries, 1957-60. Washington: U. S. Government Printing Office, 1957-60.
- _____. Wholesale Produce Markets. Market Research Report No. 91. Washington: U. S. Government Printing Office, 1955.
- _____. Yearbook of Agriculture, 1900 and 1907. Washington: U. S. Government Printing Office, 1901 and 1908.
- _____. Florida Crop and Livestock Reporting Service. Florida Vegetable Crops, Annual Statistical Summaries, 1929-61. Orlando, Florida: Florida Crop and Livestock Reporting Service, 1929-61.
- U. S., Department of Commerce, Bureau of Census. Statistical Abstracts of the United States, 1926 and 1960.
- _____. United States Census of Agriculture, 1900-60. Washington: U. S. Government Printing Office, 1900-60.
- _____. United States Census of Business, Wholesale Trade, 1948. Washington: U. S. Government Printing Office, 1952.
- Vaile, R. S., Grether, E. T., and Cox, R. Marketing in the American Economy. New York: The Ronald Press Company, 1952.
- Weld, L. D. H. The Marketing of Farm Products. New York: The Macmillan Co., 1916.

BIOGRAPHICAL SKETCH

Stanley Eugene Rosenberger was born January 2, 1923, near Micanopy, Florida. In June, 1941, he was graduated from the P. K. Yonge Laboratory School in Gainesville, Florida. He entered the University of Florida as a freshman in 1941, and the U. S. Army Air Force as a private in 1942. Immediately following military duty, he re-entered the University of Florida and in June, 1947, received the degree of Bachelor of Science in Agriculture. Mr. Rosenberger was Assistant County Agricultural Agent in Manatee County the last half of 1947. In 1948, he entered the Graduate School of the University of Florida and in February, 1949, received the degree of Master of Agriculture. In March, 1949, he joined the staff at the University of Florida as Assistant Vegetable Crops Specialist. In July, 1951, he re-entered the Graduate School of the University of Florida on a part-time basis to work toward a Doctor of Philosophy degree, while continuing to serve in a staff position. In 1957, he was promoted to Associate Marketing Specialist in Vegetable Crops but continued his part-time graduate studies. His

graduate work has been continuous from 1951 to date.

Stanley Eugene Rosenberger is married to the former Marian Alvarez and is the father of two children. He is a member of the American Society of Agricultural Engineers, the Florida State Horticultural Society, the Florida Association of Agricultural Extension Workers, Epsilon Sigma Phi, and Alpha Gamma Rho.

This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of that committee. It was submitted to the Dean of the College of Agriculture and to the Graduate Council, and was approved as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1962

W. D. Brooks
Dean, College of Agriculture

Dean, Graduate School

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